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P81061 coturnix co
O99114 homo sapien
P01035 bos taurus
P01036 homo sapien
P01037 homo sapien
O91491 homo sapien
P28325 homo sapien
P28481 cyprinus ca
O92016 mus musculu
O15828 homo sapien
O98967 oncorhynchu
O9195 oncorhynchu
O9195 oncorhynchu
P19313 rattus norv
P08935 bitis ariet
O76096 homo sapien
O89098 mus musculu
P01047 bos taurus
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O60676 homo sapien
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O97862 oryctolagus
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P09228 homo sapien
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                                      Kawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y., Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S., Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I., Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R., Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T., Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H., Kushi P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G., Blake J., Boffelli D., Bojunga M., Carninci P., de Bonaldo M.F., Buswastein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M., Gustinoich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.
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SMART; SM00043; CY; 1.
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HSSP; P01038; 1A90.

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Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombo
Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto
Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., 9
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Mammalia; Eutheria;
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                                                                                                                                                                                                                                  STRAIN=C57BL/6J; TISSUE=Epididymis; MEDLINE=21085660; PubMed=11217851;
                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                            Cystatin
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theria; Rodentia;
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inhibitor; Signal; Alternative splicing.
25
CYSTATIN 11.
137
CYSTATIN 11.
79
SECONDARY AREA OF CONTACT (1)
101
BY SIMILARITY.
134
BY SIMILARITY.
BY SIMILARITY.
130
Missing (in isoform 2).
FTId=VSP 001260.
AA; 16375 MW; C585C8C39A585C3B CRC64;
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42,
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Pred. No. 1
                                                                                                                                                                                                                                                                                                               Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRT;
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L.7e-65;
eg 0;
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-CST8_MOUSE S
P32766; 089102;
01-0CT-1993 (Rel
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DISULFID
CARBOHYD
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                     01-OCT-1993 (Rel. 27, Created)
30-MAY-2000 (Rel. 39, Last seq
28-FEB-2003 (Rel. 41, Last ann
Cystatin-related epididymal sp
related epididymal specific pr
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                                                                                    Cornwall G.A., Hsia N., Sutton H.G.; "Structure, alternative splicing and chrome cystatin-related epididymal spermatogenic
                                                                                                         STRAIN=C3H, and CD-1;
MEDLINE=99247899; PubMed=10229662;
Cornwall G.A., Hsia N., Sutton H.G
Cornwall G.A., Hsia N., Sutto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nature 409:685-690(2001
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                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pfam; PF00031; cystatin;
SMART; SM00043; CY; 1.
PROSITE; PS00287; CYSTAT
      SEQUENCE OF
                                                               Biochem.
                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                  Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                   CST8 OR CRES.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Functional annotation
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                                                                                                                                                                                                                                                                                        NCBI_TaxID=10090;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SUBCELLULAR
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P01034; 1G
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      4-142 FROM N.A.
                                                               340:85-93 (1999)
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Yoshida K., Hasegawa Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CYSTATIN;
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specific protein) (Cystatin 8)
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THE CYSTATIN FAMILY.
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BY SIMILARITY.
BY SIMILARITY.
N-LINKED (GLCNAC: .
W; F228D9815FA32640 O
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Pred. No. 1.2e-34;
                                                                                                                                                                                                                                                                                                                         Craniata; Vertebrata; Euteleostomi;
Sciurognathi; Muridae; Murinae; Mus
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., Kawaji H., I
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          precursor (Cystatin-
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EMBL; AF090691; AAC36316.1; -.
EMBL; S49926; AAC35390.1; -.
30-MAY-2000 (Rel
28-FEB-2003 (Rel
Cystatin-related
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Cornwall G.A., Orgebin-Crist M.-C., Hann S.R.;
"The CRES gene: a unique testis-regulated gene
family is highly restricted in its expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pfam; PF00031; cystatin; 1.
SMART; SM00043; CY; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUBCELLULAR LOCATION: Secreted,
TISSUB SPECIFICITY: PROXIMAL CAPUT REGION OF THE EPIDIDYMIS. LOWER
EXPRESSION IN THE TESTIS. WITHIN THE TESTIS IT IS LOCALIZED TO THE
ELONGATING SPERMATIDS, WHEREAS WITHIN THE EPIDIDYMIS IT IS
EXCLUSIVELY SYNTHESIZED BY THE PROXIMAL CAPUT EPITHELIUM.
ENCUCTION: TESTICULAR PACTORS OR HORMONES OTHER THAN ANDROGENS
PRESENT IN THE TESTICULAR FLUID MAY BE INVOLVED IN THE REGULATION
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SIMILARITY: BELONGS TO THE CYSTATIN FAMILY.
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MGI:107161; Cst8.
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                                                                                                                   STANDARD;

    39, Last sequence update)
    41, Last annotation update)
    epididymal spermatogenic protein precursor (Cystatin

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CYSTATIN-RELATED BPIDIDYMAL SPERMATOGENIC PROTEIN.
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RA Deloukas P., Matthews L.H., Abhurst J., Burton J., Gilbert J.G.R.,
RA Deloukas P., Matthews L.H., Abhurst J., Bard L.M., Beard D.M.,
RA Bailey J., Barlow K.F., Bates K.N., Beard L.M., Beare D.M.,
RA Bailey J.P., Bird C.P., Blakey S.E., Bridgeman A.M., Brown A.J.,
RA Beasley O.P., Bird C.P., Blakey S.E., Bridgeman A.M., Brown A.J.,
RA Buck D., Burrill W.D., Butler R.P., Carder C., Carter N.P.,
RA Cheggs S., Cobley V.E., Collier R.E., Connor R.E., Corby N.R.,
Clegg S., Cobley V.E., Collier R.E., Connor R.E., Corby N.R.,
RA Clegg S., Cobley V.E., Collier R.B., Connor R.E., Corby N.R.,
RA Clegg S., Cobley V.E., Collier R.B., Connor R.E., Corby N.R.,
RA Clegs S., Cobley V.E., Collier R.B., Connor R.E., Corby N.R.,
RA Clegs S., Cobley V.E., Collier R.B., Connor R.E., Corby N.R.,
RA Cligg S., Cobley V.E., Collier R.B., Connor R.E., Corby N.R.,
RA Cligg S., Cobley V.E., Collier R.B., Connor R.E., Corby N.R.,
RA Hammond S., Frankland J.A., Fraser A., French L., Garner P.,
RA Hammond S., Harley J.L., Heath P.D., Ho S., Holden J.L., Howden P.J.,
RA Hammond S., Harley J.L., Heath P.D., Ho S., Holden J.L., Howden P.J.,
RA Hammond S., Harley J.L., Heath P.D., Ho S., Holden J.L., Howden P.J.,
RA Kay M.P., Kimberley A.M., King A., Knights A., Laird G.K., Lawlor S.,
RA Kay M.P., Kimberley A.M., King A., Knights A., Laird G.K., Lawlor S.,
RA Milnes S.A., Mistry D., Moore M.J.P., Mullikin J.C., Nickerson T.,
RA Milnes S.A., Mistry D., Moore M.J.P., Mullikin J.C., Nickerson T.,
RA Rice C.M., Ross M.T., Scott C.E., Sehra H.K., Shownkeen R., Sims S.,
RA Swann R.M., Sycamore N., Taylor R., Tee L., Thomas D.W., Thorpe A.,
RA Milnes S.L., Whittaker P., Williams L., Williams S.A.,
RA Milnes A., Miltehead S.L., Whittaker P., Williams L., Williams S.A.,
RA Milnes A., Milles R., Hubbard T., Durbin R.M., Bentley D.R., Beck S.,
                                                                                                                                                                                                                                                                                  This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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Eukaryota; Metazoa;
                      SIGNAL
                                                           Pfam; PF00031; cystatin; SMART; SM00043; CY; 1.
Thiol protease inhibitor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "The DNA sequence and comparative analysis of human Nature 414:865-871(2001).
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                                                                                                                                                  Genew; HGNC:2480; CST8.
GO; GO:0004869; F:cysteine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Rogers
                                                                                                                                  InterPro; IPR000010; Cystatin.
                                                                                                                                                                                                  HSSP; P01034;
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TISSUB SPECIFICITY: PROXIMAL CAPUT REGION OF THE EPIDIDYMIS.
EXPRESSION IN THE TESTIS. WITHIN THE TESTIS IT IS LOCALIZED ELONGATING SPERMATIDS, WHEREAS WITHIN THE EPIDIDYMIS IT IS EXCLUSIVELY SYNTHESIZED BY THE PROXIMAL CAPUT EPITHELIUM.
SIMILARITY: BELONGS TO THE CYSTATIN PAMILY.
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Primates;
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                                                             Signal; Polymorphism
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POTENTIAL.

CYSTATIN-RELATED BPIDIDYMAL SPERMATOGENIC PROTEIN.
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30-MAY-2000
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                                                                                                                                    Thiol
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cornwall G.A., Hsia N., Sutton H.G.; "Structure, alternative splicing and chromosomal localization cystatin related epididymal spermatogenic gene."; Biochem. J. 340:85-93(1999).
                                                                                                                                                       Pfam; PF00031; cystatin; 1. SMART; SM00043; CY; 1.
                                                                                                                                                                                                                                                                                              entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRAIN=Sprague-Dawley; TISSUE=Epic
MEDLINE=99247899; PubMed=10229662;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Rattus norvegicus (Rat).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-MAY-2000
15-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VARIANT
                                                                                                                                                                                                        InterPro; IPR000010; Cystatin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=10116;
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                                                                                                                                                                                                                                                                                                                                     European Bioinformatics Institute. There are no restrictions by non-profit institutions as long as its content is in ified and this statement is not removed. Usage by and for continuous and the statement is not removed.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIMILARITY: BELONGS TO THE CYSTATIN FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FUNCTION: PERFORMS A SPECIALIZED ROLE DURING SPERM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SUBCELLULAR LOCATION: Secreted
                                                                                                                                                                                                                                                                                                                                                                                                           SWISS-PROT entry is copyright. It is produced through a collaboration een the Swiss Institute of Bioinformatics and the EMBL outstation
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36.3%;
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Last annotation update)
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Pred. No. 4.9e-13;
                                                                                        POTENTIAL.
CYSTATIN-RELATED EPIDIDYMAL
                                                                     PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /FTId=VAR_014527.
9A3512757E0F4ECD CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Rat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
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                                                CONTACT
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        MEDLINE-22386257; PubMed-12477932;

Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

Klausher R.D., Collins F.S., Wagner L., Shemmen C.M., Schuler G.D.,

Klausher R.D., Collins B.S., Wagner L., Shemmen C.M., Schuler G.D.,

Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunzatne P.H.,

Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

Villalon D.K., Muzny D.M., Sodergran E.J., Lu X., Glibbs R.A.,

Villalon D.K., Muzny D.M., Sodergran B.J., Lu X., Glibbs R.A.,

Paterson M. Madan A. Dodardene B. Garche A.
                                                                                                                                                                                                                                                STRAIN=ILS, and ISS;
MEDLINB=21363810; PubMed=11471062;
Ehringer M.A., Thompson J., Conroy O., Xu
Beeson M., Gordon L., Bennett B., Johnson
"High-throughput sequence identification
within alcohol-related QTLs.";
                                                                                                                                                                                                                                                                                                                                                                                    STRAIN=129/Sv; TISSUE=Liver; MEDLINE=95137392; PubMed=7835704; Huh C., Negle J.W., Kozak C.A., Abrahamson M., "Structural organization, expression and chrome mouse cystatin-C-encoding gene (Cst3).";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOLEM M., Rawson C., Lindburg K., Barnes D. "Transforming growth factor beta regulates mouse embryo (SPME) cells.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CST3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-FEB-1996
15-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
STRAIN=BALB/c; TISSUE=Brain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cystatin C precursor
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                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                           Gene 152:221-226(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Biochem. Biophys. Res. Commun. 172:945-951(1990)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE=91054522; PubMed=2241983;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NCBI_TaxID=10090;
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                                                                                                                                                                                                                                     Genome 12:657-663(2001).
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45; Conserv
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142 AA;
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(Rel. 42, Last annotation update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chordata;
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 Ketteman M.,
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tt B., Johnson T.E., Sikela
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Craniata; Vertebrata; Euteleostomi;
Sciurognathi; Muridae; Murinae; Mus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           202; DB 1;
No. 4.9e-13;
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Rodrigues S.,
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DT 16-OCT
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DE Cystat
GN CST3.
OS Orycto
OC Bukary
OC Mammal
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Best Local (
                                                                             16-OCT-2001 (Rel. 4)
28-FEB-2003 (Rel. 4)
Cystatin C precursor
CST3
                                                                                                                                                                   CYTC_RABIT
097862;
16-OCT-2001
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Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
"Generation and initial analysis of more than 15,000 full-length
human and mouse cDNA sequences.";
Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
-I-FUNCTION: AS AN INHIBITOR OF CYSTEINS PROTEINASES, THIS PROTE
THOUGHT TO SERVE AN IMPORTANT PHYSIOLOGICAL ROLE AS A LOCAL
REGULATOR OF THIS ENZYME ACTIVITY.
-I- SIMILARITY: BELONGS TO THE CYSTATIN FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CONFLICT
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HSSP; P01034; 1G96.
MGD; MGI:102519; Cst3.
InterPro; IPR000010; Cystatin.
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EMBL;
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SMART; SM00043; CY; 1.
PROSITE; PS00287; CYSTATIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; AF483486; AAL90760.1; -. EMBL; AF483487; AAL90761.1; -. EMBL; BC002072; AAH02072.1; -.
                                               Oryctolagus cuniculus
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    Bukaryota; Metazoa;
Mammalia; Eutheria;
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                                                                                                precursor.
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103
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us (Rabbit).
Chordata; Craniata; Vertebrata; Euteleostomi;
Lagomorpha; Leporidae; Oryctolagus.
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BY SIMILARITY.
BY SIMILARITY.
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L -> F (IN REF.
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-> F (IN REF. 1).
3A563406DD58D0F5 CRC64;
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Matches 42
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ACT_SITE
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15-JUL-1998
28-FEB-2003
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019093;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as slong as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 method involving the preparation of Genes Cells 3:459-475(1998).
SEQUENCE FROM N.A.

MEDLINE=97054523; PubMed=8898820;

Med L.H., Walker L.C., Levy B.;

"Cystatin C. Icelandic-like mutation

cerebrovascular beta-amyloidosis.";

Stroke 27:2080-2085(1996).
                                                                                                                                                                             Saimiri sciureus (Common squirrel monkey).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Cebinae; Saim
                                                                                                                                                                                                                                                CST3
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Kawashima H.;
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Kobori M., Ikeda Y., Nara H., Kato M.,
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-1- SIMILARITY: BELONGS TO THE CYSTATIN FAMILY.
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n C precursor.
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Pred. No. 2.7e-11;
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P09228; Q9UCQ7;
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01-MAR-1989 (Rel
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MEDLINE=21638749; PubMed=11780052; Deloukas P., Matthews L.H., Ashurst J., Burton J., Gilbert J.G.! Deloukas P., Matthews L.H., Ashurst J.P., Babbage A.K., Bagguley C.! Jones M., Stavrides G., Almeida J.P., Babbage A.K., Bagguley C., Bailey J., Barlow K.F., Bates K.N., Beard L.M., Beare D.M., Beasley O.P., Bird C.P., Blakey S.E., Bridgeman A.M., Brown A.J. Buck D., Burrill W.D., Butler A.P., Carder C., Carter N.P.,
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Mammalia; Eutheria;
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Saitoh E., Kim H.-S.,
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dified and this statement is not removed. Usage by ar
titles requires a license agreement (See http://www.isb
send an email to license@isb-sib.ch).
                                                                                                                                                                           INE=88185836; PubMed=3446578; oh E., Kim H.-S., Smithies O., Maec an cysteine-proteinase inhibitors: hree members of the cystatin gene f61:329-338(1987).
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1 26 BY SIMILARITY.

27 146 CYSTATIN C.

37 37 REACTIVE SITE.

81 85 SECONDARY AREA OF CO.

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123 143 BY SIMILARITY.
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RA Chapman J.C., Clamp M., Clark G., Clark L.N., Clark S.Y., Clee C.M., RA Clegg S., Cobley V.E., Collier R.E., Connor R.E., Corby N.R., RA Coulson A., Coville G.J., Deadman R., Dhami P.D., Dunn M., RA Coulson A.G., Frankland J.A., Fraser A., French L., Garner P., RA Ellington A.G., Frankland J.A., Fraser A., French L., Garner P., RA Ellington A.G., Frankland J.A., Fraser A., French L., Garner P., RA Hammond S., Harley J.L., Heath P.D., Ho S., Holden J.L., Howden P.J., Hunt S.R., Jekosch K., Johnson C.M., Johnson D., RA Huckle E., Hunt A.R., King A., Knights A., Laird G.K., Lawlor S., RA Kay M.P., Kimberley A.M., King A., Knights A., Laird G.K., Lawlor S., RA Kay M.P., Kimberley A.M., King A., Knights A., Laird G.K., Lawlor S., RA Kay M.P., Kimberley A.M., King A., Knights A., Laird G.K., Lawlor S., RA Kay M.P., Kimberley A.M., King A., Knights A., Laird G.K., Lawlor S., RA Marsh V.L., Martin S.L., McConnachie L.J., McLay K., McMurray A.A., RA Miles S.A., Mistry D., Moore M.J.F., Mullikin J.C., Nickerson T., RA Millimore B.J.C.T., Patel R., Pearce T.A.V., Peck A.I., Phillimore B.J.C.T., Prathalingam S.R., Plumb R.W., Ramsay H., RA Rice C.M., Ross M.T., Scott C.B., Sehra H.K., Shownkeen R., Sims S., Shue C.D., Smith M.L., Soderlund C., Steward C.A., Sulston J.B., RA Skuce C.D., Smith M.L., Soderlund C., Steward C.A., Sulston J.B., RA Swann R.M., Sycamore N., Taylor R., Tee L., Thomas D.W., Thorpe A., RA Tacey A., Tromans A.C., Vaudin M., Wallis J.M., Walliams L., Williams S.A., RA Rocers J., Whittaker P., Willey D.L., Williams L., Williams S.A., RA Rocers J., Walley D.L., Wallis J.M., Bentley D.R., Beck S.,
                                                                                                                                                                                                                                                      Saitoh E., Isemura S., Sanada K., Kim H.-S., Sm:
"Cystatin superfamily. Evidence that family II of evolutionarily related to family III cystatin generated to family III cystatin generated. Hoppe-Seyler 369:191-197(1988).
-!- FUNCTION: Thiol protease inhibitor.
-!- SUBCELLULAR LOCATION: Secreted.
-!- SIMILARITY: BELONGS TO THE CYSTATIN FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                proteinase inhibitor (cystatin SA) structurally closely recystatin S, from human whole saliva.";
J. Biochem. 102:693-704(1987).
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"Identification of full-sized forms
                                                                                                                             entities
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               ; M19673; AAA36116.1; ; M19671; AAA36116.1; ; M19672; AAA36116.1; ; M19672; AAA36116.1; ; AL591074; CAC94784.1;
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an email to license@isb-sib.
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(1986).
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PO1038;
21-UTL-1986 (Rel. 01, Created)
01-OCT-1989 (Rel. 12, Last sequence up
28-FEB-2003 (Rel. 41, Last annotation
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MEDLINE=83256421;
Anastasi A., Brown
Sunter D.C., Barre
                                                                                                                SEQUENCE OF 24-139.

MEDILINE=84178305; PubMed=6712597;

Schwabe C., Anastasi A., Crow H., McDonald J.K.,

"Cystatin. Amino acid sequence and possible secor

Biochem. J. 217:813-817(1984).
                                                                                                                                                                             SEQUENCE FROM N.A.
MEDIJNE=90008873; Pubmed=2793849;
Colella R., Sakaguchi Y., Nagase
"Chicken egg white cystatin. Mole
and tissue distribution.";
                                                                                                                                                                                                                                                 Cystatin precursor (Egg-white cystatin).
Gallus gallus (Chicken).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
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Thiol proton
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MIM;
                                          "Protein inhibitors of cysteine proteinases. of cystatin from chicken egg white."; Hoppe-Seyler's Z. Physiol. Chem. 364:1487-14
                                                                       Machleidt
                                                                             MEDLINE-84110059; PubMed-6662498;
Turk V., Brzin J., Longer M., Ritonja A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE
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                            CHARACTERIZATION OF PROTEIN.
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        S421; PubMed=6409085;
Brown M.A., Kembhavi
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Pred. No. 2,7e-10;
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         A.A.,
                                                                                                                         possible secondary structure.";
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                                                                              Bropkin M.,
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          M.J.H.,
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Bode W., Engh R., Musil D., Thiele U., Huber R., Karshikov A.,
Brzin J., Kos J., Turk V.;
"The 2.0 A X-ray crystal structure of chicken egg white cystatin
its possible mode of interaction with cysteine proteinases.";
                                                                              DISULFID
                                                                                                                         SIGNAL
                                                                                                                                           Pfam; PF00031; Cystatin; 1.
SMART; SM00043; CY; 1.
PROSITE; PS00287; CYSTATIN;
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Cribb A., Loefberg H.,
                                                                                                                                                                                                                  EMBL; J05077; AAA48744.1;
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FEBS Lett. 248:162-168(1989).
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MEDLINE=89252033; PubMed=2721673;
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1A90;
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 Barrett A.J.;
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"Cystatin, a protein inhibitor of cysteine proteinases. Improved purification from egg white, characterization, and detection in chicken serum.";
Biochem. J. 211:129-138(1983).

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Turk V.,

Huber

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(2.0 ANGSTROMS)

Dieckmann T., Mitschang L., Hofmann M., Kos J., Turk V.,
Auerswald E.A., Jeanicke R., Oschkinat H.;
"The structures of native phosphorylated chicken cystatin and of a
recombinant unphosphorylated variant in solution.";
J. Mol. Biol. 234:1048-1059(1993).
-1- FUNCTION: THIS PROTEIN BINDS TIGHTLY TO AND INHIBITS A VARIETY
THIOL PROTEASES INCLUDING FICIN, PAPAIN, AND CATHEPSINS B, C, H
AND L. ALTHOUGH ISOLATED FROM EGG WHITE, IT IS ALSO PRESENT IN 읶

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or send an email to license@isb-sib.ch).

Phosphorylation; Signal; 3D-structure

CYSTATIN.
REACTIVE SITE.
SECONDARY AREA PHOSPHORYLATION (PARTIAL) ę CONTACT

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MEDLINE=88313920; PubMed=3044831;

Esnard A., Esnard F., Faucher D., Gauthier

"Two rat homologues of human cystatin C.";

FEBS Lett. 236:475-478(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                      Brillard M., Gauthier F., "Rat cystatin C: the complete N-glycosylation.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                          [2]
SEQUENCE OF 8-127.
MEDLINE-90380276; PubMed-240057
Senard F., Esnard A., Faucher
Senard F., Senard A., Faucher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE=90092122; PubMed=2689174; Cole T., Dickson P.W., Esnard F., Gauthier F., Schreiber G.;
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                                                                                                                               MEDLINE=92225121; PubMed=1563513;
Esnard A., Esnard F., Guillou F., Gauth
"Production of the cysteine proteinase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "The cDNA structure and expression analysis of the genes for the cysteine proteinase inhibitor cystatin C and for beta 2-microglo
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Eukaryota; Metazoa; Cho
Mammalia, Eutheria; Rod
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01-APR-1990 (Rel. 14,
28-FEB-2003 (Rel. 41,
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                                                                                                               Sertoli cells."
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             IOLI CELLE. () 00:131-135(1992).

LETT. 300:131-135(1992).

FUNCTION: AS AN INHIBITOR OF CYSTEINE PROTEINASES, THIS PROTEIN FUNCTION: AS AN INHIBITOR OF CYSTEINE PROTEINASES, THIS PROTEIN FUNCTION: AS A LOCAL THOUGHT TO SERVE AN IMPORTANT PHYSIOLOGICAL ROLE AS A LOCAL THOUGHT. KNOWN TO INHIBITS CATHEPSIN
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"Structure and expression of Biochem. J. 268:287-294(1990)
                                 TISSUE-Leukocyte;
MEDLINE=90303202; PubMed=2363674;
Abrahamson M., Olafsson I., Palsdottir A.,
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                                                                                          Abrahamson M., Grubb A., Olafsson I., Lundw
"Molecular cloning and sequence analysis of
precursor of the human cysteine proteinase
FEBS Lett. 216:229-233(1987).
                                                                                                                               TISSUE=Placenta;
MEDLINE=87219149; PubMed=3495457;
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Mammalia; Eutheria;
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RA Jones M., Stavrides G., Almeida J.P., Babbage A.K., Bagguley C.L.,
RA Bailey J., Barlow K.F., Bates K.N., Beard L.M., Beare D.M.,
RA Bailey J., Bird C.P., Blakey S.B., Bridgeman A.M., Brown A.J.,
RA Beasley O.P., Bird C.P., Blakey S.B., Bridgeman A.M., Brown A.J.,
RA Chapman J.C., Clamp M., Clark G., Clark L.N., Clark S.Y., Clee C.M.,
RA Chapman J.C., Clamp M., Clark G., Clark L.N., Clark S.Y., Clee C.M.,
RA Clegg S., Cobley V.B., Collier R.E., Connor R.B., Corby N.R.,
RA Clegg S., Cobley V.B., Collier R.B., Connor R.B., Corby N.R.,
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RA Hammond S., Harley J.L., Heath P.D., HO S., Holden J.L., Howden P.J.,
RA Hammond S., Harley J.L., Heath P.D., HO S., Holden J.L., Howden P.J.,
RA Huckle B., Hunt A.R., King A., Knights A., Laird G.K., Lawlor S.,
RA Kay M.P., Kimberley A.M., King A., Knights A., Laird G.K., Lawlor S.,
RA Lehvaeslaiho M.H., Leversha M.A., Lloyd C., Lloyd D.M., Lovell J.D.,
RA Milne S.A., Mistry D., Moore M.J.F., Mullikin J.C., Nickerson T.,
RA Milne S.A., Mistry D., Moore M.J.F., Mullikin J.C., Nickerson T.,
RA Phillimore B.J.C.T., Prathalingam S.R., Plumb R.W., Ramssy H.,
RA Swann R.M., Sycamore N., Taylor R., Teee L., Thomas D.W., Thorpe A.,
RA Whitehead S.L., Wallia M., Wallia J.M.,
RA Wilming L., Wray P.W., Hubbard T., Durbin R.M., Bentley D.R., Beck S.,
RA ROders J.., Walliams L., Williams S.A.,
RA Wilming L., Wary P.W., Hubbard T., Durbin R.M., Bentley D.R., Beck S.,
WREDLINE=22388257; PubMed=12477932;

X Strausberg R.L., Feingold B.A., Grouse L.H., Derge J.G.,

X Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,

X Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

X Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

X Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

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X Hopkins R.F., Jordan H., Moore T., Max, Rubin G.M., Hong L.,

X Hopkins R.F., Jordan H., Moore T., Max, Rubin G.M., Hong L.,

X Hopkins R.F., Jordan H., Farmer A.A., Rubin G.M., Hong L.,

X Hopkins R.F., Jordan H., Peters G.J., Abramson R.D., Mullahy S.J.,

X Hopkins R.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

X Hosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

X Holards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

X Hilalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

X Halbards S., Worley K.C., Hale S., Garcia A.M., Gibbs R.A.,

X Hilalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

X Pahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,

X Hallan H., Wadan A., Young A.C., Shevchenko Y., Bouffard G.G.,

X Hallan M., Wadan A., Touchman J.W., Green E.D., Dickson M.C.,

X Hollon J., Krzywinski M.I., Skalska U., Smailus D.E.,
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"Human gamma-trace, a basic microprotein: amino acid presence in the adenohypophysis.";

Proc. Natl. Acad. Sci. U.S.A. 79:3024-3027(1982).
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"The disulphide bridges of human cys
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MEDLINE-84110059; PubMed = 6662498;
Turk V., Brzin J., Longer M., Ritonja A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Schnerch A.,
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                                                                                        SUBUNIT: Homodimer:

TISSUE SPECIFICITY: IT IS EXPRESSED IN HIGHEST LEVELS IN THE
TISSUE SPECIFICITY: IT IS EXPRESSED IN HIGHEST LEVELS IN THE
EPIDIDYMIS, VAS DEFERENS, BRAIN, THYMUS, AND OVARY AND THE LOWEST
IN THE SUBMANDIBULAR GLAND.
IN THE SUBMANDIBULAR FORM OF CEREBRAL HEMORRHAGE
CHARACTERIZED BY A THICKERNING OF THE CHARACTERISTICS OF AMYLOID. THIS
DEPOSITION OF MATERIAL MITH THE CHARACTERISTICS OF AMYLOID. THIS
DISBASE IS KNOWN AS HEREDITARY CEREBRAL HEMORRHAGE WITH
AMYLOIDOSIS (HCHWA), OR HEREDITARY CYSTATIN C AMYLOID AS ICELANDIC CEREBROVASCULAR TYPE AMYLOIDOSIS.
SIMILARITY: BELONGS TO THE CYSTATIN FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            FUNCTION: AS AN INHIBITOR OF CYSTEINE PROTEINASES, 'THOUGHT TO SERVE AN IMPORTANT PHYSIOLOGICAL ROLE AS REGULATOR OF THIS ENZYME ACTIVITY.
SWISS-PROT entry is copyright. It is produced through sen the Swiss Institute of Bioinformatics and the EV
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Natl. Acad. Sci. U.S.A. 99:16899-16903(2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ဝူ
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l. Chem.
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than 15,000 full-length
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Best Local
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EMBL; M27890; AAA52164.1; JOINED.
EMBL; M27890; CAA43856.2; -
EMBL; X61681; CAA43856.2; JOINED.
EMBL; X61682; CAA43856.2; JOINED.
EMBL; X61683; CAA43856.2; JOINED.
EMBL; A51319564; AAK11570.1; -
EMBL; AF319564; AAK11570.1; -
EMBL; BC013083; AAK13083.1; -
                                                                                                                                                                                                                                                                                                                 CYTC MACMU STANDARI
019032;
15-JUL-1998 (Rel. 36, I
15-JUL-1998 (Rel. 36, I
28-FEB-2003 (Rel. 41, I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Polymorphism; 3D-structure.
SIGNAL 1 26
CHAIN 27 146
ACT_SITE 37 37
SITE 81 85
DISULFID 99 109
DISULFID 123 143
                                                                                                                      MEDLINE=97054523; PubMed=8898820; Wei L.H., Walker L.C., Levy B.; Wei L.H., Walker L.C. Levy B.; "Cystatin C. Icelandic-like mutation in cerebrovascular beta-amyloidosis."; Stroke 27:2080-2085(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Genew; HGI
MIM; 6043:
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way
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                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutele
Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
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                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                    NCBI_TaxID=9544;
                                                                                                                                                                                                                                    Cercopithecinae; Macaca.
                                                                                                                                                                                                                                                                             Macaca mulatta (Rhesus macaque).
                                                                                                                                                                                                                                                                                                        Cystatin C precursor.
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                                                                    SIMILARITY: BELONGS TO THE CYSTATIN FAMILY.
                                                                               FUNCTION: AS AN INHIBITOR OF CYSTEINE PROTEINASES, THIS THOUGHT TO SERVE AN IMPORTANT PHYSIOLOGICAL ROLE AS A LC REGULATOR OF THIS ENZYME ACTIVITY.
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HGNC:2475; CST3.
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                                                                                                                                                                                                                                                                                                                                                                                                                                             AFCSFQIYAVPW-QGTMTLSKSTCQD 145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MAEPWQALQUILAILLTLMALPYQARK-----KTFLSVHEVMAVENYAKDSLQWITDQY 54
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              inhibitor; Amyloid; Signal; Disease mutation;
                                                                                                                                                                                                                                                                                                                                                                           STANDARD;
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Last sequence update)
                                                                                                                                                                                                                                                                                                                     Last annotation update)
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REACTIVE SITE.
SECONDARY AREA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 171; DB 1;
Pred. No. 5.6e-10;
6; Mismatches 64
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                                                                                               IS PROTEIN
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CYT_COTJA
P81061;
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Best Local
                                  Thiol protease:
ACT_SITE 9
SITE 53
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15-JUL-1998
28-FEB-2003
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DISULFID
SEQUENCE
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ACT SITE
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                                                                                                                                                                          SEQUENCE.
TISSUE=Egg white;
MEDLINE=97420480; PubMed=9276465;
MEDLINE=97420480; PubMed=9276465;
Gerhartz B., Engh R.A., Mentele R., Eckerskorn C
Wittman J., Kolb H.J., Machleidt W., Fritz H., A
"Quail cystatin: isolation and characterisation
the cystatin family and its hypothetical interac
                                                                           Pfam; PF00031; cystatin; 1.
SMART; SM00043; CY; 1.
                                                                                                                                                                                                                                                                NCBI_TaxID=93934;
                                                                                                                                                                                                                                                                                                  Bukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EMBL; U51912; AAB64050.1;
HSSP; P01034; 1G96.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           entities requires a license agreement (Some send an email to license@isb-sib.ch).
                                                                                                                      -1- FUNCTION: THIS PROTEIN CATHEPSIN B.
-1- SIMILARITY: BELONGS TO
                                                                                                                                                        FEBS Lett.
                                                                                                                                                                                                                                                                                        Archosauria;
                                                                                                                                                                                                                                                                                                          Coturnix coturnix japonica (Japanese quail).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIGNAL
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SMART; SM00043; CY; 1.
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                                                                    PROSITE;
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                                                                                                            HSSP; P01038; 1CEW.
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                                                                    PS00287;
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Weognathae; Galliformes; Phasianidae;
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                                                                                                                                                                          Wentele R., Eckerskorn C., Torquato R., Machleidt W., Fritz H., Auerswald E.A.; ion and characterisation of a new member of its hypothetical interaction with cathepsin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BY SIMILARITY.
CYSTATIN C.
CYSTATIN C.
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annotation updat
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Pred. No. 7e-10;
   PHOSPHORYLATION
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idae; Phasianinae;
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                                                                                                                                                This SWISS-PROT entry is copyright. It is produced through a collaboratic between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on it use by non-profit institutions as long as its content is in no was modified and this statement is not removed. Usage by and for commercial
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28-FEB-2003 (Rel. 41, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
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                                                                                                        entities requires a license agreement (S or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                 "The DNA sequence and comparative analysis of human Nature 414\!:\!865\!-\!871(2001).
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Mammalia; Eutheria;
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stazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
theria; Primates; Catarrhini; Hominidae; Homo.
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BELONGS TO THE CYSTATIN FAMILY.
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Thiol protease inhibitor; Signal.
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Copyright (c) 1993 - 2004 Compugen Ltd.
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Sequence 25272, A	Sequence 6426, Ap	28,	Sequence 23, Appl	e 28,	Sequence 450, App	Sequence 120, App	Sequence 93, Appl	e 92,	e 91,	e 89,	83,	Sequence 82, Appl	Sequence 5674, Ap	e 7, A	Sequence 12, Appl	e 12,	Sequence 53, Appl	e 78	4	e 4,	26:	e 6,	φ,	e 29468,	Sequence 27593, A	Sequence 25540, A	Description

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ALIGNMENTS

US-09-252-991A-25540

Sequence 2540, Application US/09252991A

Patent No. 6551795

GENERAL INFORMATION:
APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPBUTICS

FILE REFERENCE: 107196.136

FULB REFERENCE: 107196.136

CURRENT APPLICATION NUMBER: US/09/252,991A

CURRENT FILING DATE: 1999-02-18

PRIOR APPLICATION NUMBER: US 60/074,788

PRIOR APPLICATION NUMBER: US 60/074,788

PRIOR APPLICATION NUMBER: US 60/094,190

PRIOR APPLICATION NUMBER: US 60/094,190

PRIOR FILING DATE: 1998-07-27

NUMBER OF SEQ ID NOS: 33142

SEQ ID NO 25540

LENGTH: 422 ORGANISM: Pseudomonas aeruginosa

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US-09-252-991A-29468
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US-09-252-991A-27593
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                                                  Query Match
Best Local Similarity
Thes 7; Conserve
                                                                                                                                                                                        SEQ ID NO 29468
LENGTH: 327
                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
APPLICANT: Marc J.
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Patent No. 6551795
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SEQ ID NO 27593
LENGTH: 295
TYPE: PRT
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GENERAL INFORMATION:
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Matches 8; Conserv
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                                                                                                                                                                                                                                                                                                                                         APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTTICS
TILE REFERENCE: 107196.136
                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/09/252,991A CURRENT FILING DATE: 1999-02-18 PRIOR APPLICATION NUMBER: US 60/074,788 PRIOR FILING DATE: 1998-02-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/09/252,991A CURRENT FILING DATE: 199-02-18 PRIOR APPLICATION NUMBER: US 60/074,788 PRIOR FILING DATE: 1998-02-18 PRIOR APPLICATION NUMBER: US 60/094,190 PRIOR FILING DATE: 1998-07-27
                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: US 60/094,190 PRIOR FILING DATE: 1998-07-27 NUMBER OF SEQ ID NOS: 33142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: MARC J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.136
                                                                                                                                                        ORGANISM: Pseudomonas aeruginosa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              / Match 5.1%; Scc
Local Similarity 100.0%; Pi
nes 7; Conservative 0;
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134 LQLLLAI 140
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                                ГОГГГАІ 14
                                                                   Conservative
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                                                                   k; Score 7; DB 4
k; Pred. No. 31;
0; Mismatches
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Pred. No.
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5. 3.9;
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                                                                                                   Length 327;
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CURRENT APPLICATION NUMBER: US/09/573,986
CURRENT FILING DATE: 2000-05-18
NUMBER OF SEQ ID NOS: 27
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 6
LENGTH: 415
TYPE: PRT
ORGANISM: Homo sapiens
US-09-573-986-6
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Matches 7; Conservative
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Patent No. 6261801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                          APPLICANT: Gentz, Reiner
APPLICANT: Ruben, Steven
TITLE OF INVENTION: Tumoz
                                                                                                                                                                                                APPLICANT: Wei, Ying APPLICANT: Ni, Jian APPLICANT: Gentz, Re APPLICANT: Ruben, St
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NAME: BROOKES, ANDERS A
REGISTRATION INFORMER: 36,373
REFERENCE/DOCKET NUMBER: PF34
TELECOMMUNICATION INFORMATION:
TELEPAN: (301) 309-8504
TELEPAN: (301) 309-8512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: (301) 309-8512 INFORMATION FOR SEQ ID NO: 6:
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APPLICANT: WEI, Y
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ZIP: 20850
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOCTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: TUMOR NECROSIS FACTOR RECEPTOR 5
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
ADDRESSEE: HUMAN GENOME SCIENCES, INC.
STREET: 9410 KEY WEST AVENUE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
LENGTH: 415 amino acids
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STATE: MD
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY:
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RUBEN, STEVEN
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Pred. No.
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APPLICANT: MAYC J. RUBENII 2 C C APPLICANT: MAYC J. RUBENII 2 C C AND AMINO AC TITLE OF INVENTION: NUCLEIC ACID AND AMINO AC TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTIC FILE REFERENCE: 107196.136

CURRENT APPLICATION NUMBER: US/09/252,991A

CURRENT FILING DATE: 1999-02-18

PRIOR APPLICATION NUMBER: US 60/074,788

PRIOR APPLICATION NUMBER: US 60/094,190

PRIOR APPLICATION NUMBER: US 60/094,190

PRIOR APPLICATION NUMBER: US 60/094,190

PRIOR FILING DATE: 1998-07-27

NUMBER OF SEQ ID NOS: 33142

SEQ ID NO 26146

LENGTH: 512
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Best Local Similarity 100.0%; P
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Matches
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Patent No. 5707829
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                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                ATTORNEY/AGENT INFORMATION:
NAME: Brown, Scott A.
REGISTRATION NUMBER: 32,724
REFERENCE/DOCKET NUMBER: GI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                       JUMBER OF SEQUENCES:
ELECOMMUNICATION INFORMATION:
                                                                                           APPLICATION NUMBER: US/08/514,014
FILING DATE:
CLASSIFICATION: 514
                                                                                                                                                                                                                                                                                                            STREET: 87 Cambridge
CITY: Cambridge
STATE: Massachusetts
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TLE OF INVENTION: DNA SEQUENCES AND SECRETED PROTEINS
TLE OF INVENTION: ENCODED THEREBY
                                                                                                                                                                                                                                                                                                  COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE:
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Similarity 100.0%;
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VENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
VENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                        E: Genetics Institute, Inc. -- Legal Affairs
87 CambridgePark Drive
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                                                                                                                                                                                                                                                                                                  USA
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Pred. No. 37;
0; Mismatches
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                                                                                   TOPOLOGY: linear

HOLECULE TYPE: protein
US-08-833-823-4
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                Query Match
Best Local Similarity
7; Conser
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                                                                                                                                                                                                                                                CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/514,01
FILING DATE: 11-AUG-1995
ATTORNEY/AGENT INFORMATION:
NAME: Brown, Scott A.
REGISTRATION NUMBER: 32,724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                           TELEFAX: (617) 876-5851
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: McCoy, John
APPLICANT: Kelleher, Kerry
APPLICANT: Carlin, McKeough
TITLE OF INVENTION: DNA SEQUE
TITLE OF INVENTION: ENCODED 1
NUMBER OF SEQUENCES: 12
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/833,823
FILING DATE: 10-APR-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
                                                                                                                               SEQUENCE CHARACTERISTICS:
LENGTH: 661 amino acids
TYPE: amino acid
                                                                                                                                                                                                        TELECOMMUNICATION INFORMATION: TELEPHONE: (617) 498-8224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Jacobs, Kenneth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET: 87 Cambridge
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10 LLLAILL 16
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-arity 100.0%;
Conservative
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87 CambridgePark Drive
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                             Conservative
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                                                                                                                                                                                                                                                                                              UMBER: 08/514,014
11-AUG-1995
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Pred. No.
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b. 56;
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US-09-328-352-7835
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Patent No. 6562958
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                  PILING DATA: 514
CLASSIFICATION: 514
PRIOR APPLICATION NUMBER: US 08/0
APPLICATION NUMBER: US 08/0
TIT THE DATE: 18-MAY-1993
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APPLICANT: Gary L. Breton et al.
APPLICANT: Gary L. Breton et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTER
TITLE OF INVENTION: BAUMANNII FOR DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/09/328,352
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TYPE: PRT
                                                                                                  COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Vc
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/851,567B
FILING DATE: 05-MAY-1997
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                                                                                                                                                                                                             COMPUTER READABLE FORM:
              FILING DATE: 18-MAY-
PRIOR APPLICATION DATA:
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CITY: Indianapolis
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Local Similarity 100.0%;
les 7; Conservative (
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9330 Zionsville Road
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Sukhapinda, Kitisri
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Blackburn, Michael B.
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Patig, Raymond
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                                                  US 08/063,615
US 08/395,497
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SEQUENCE CHARACTERISTICS:
LENGTH: 1844 amino aci
                         COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patenth Release #1.0,
CURRENT APPLICATION DATA:
                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
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NUMBER: US 60/007,255
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APPLICATION NUMBER: US 08/705,484
FILING DATE: 28-AUG-1996
ATTORNEY/AGENT INFORMATION:
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TELEPHONE: 608-251-5000
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CITY: Indianapolis
APPLICATION NUMBER: PILING DATE: 05-MA
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REGISTRATION NUMBER: 27386
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Strickland, James A.
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Bowen, David J
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Blackburn, Michael B.
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 05-MAY-1997
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100.0%;
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                                                Release #1.0, Version #1.30
                  US/08/851,567B
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PRIOR APPLICATION

APPLICATION NUMBER:

US 08/395,497

APPLICATION NUMBER: US 0 FILING DATE: 18-MAY-1993

US 08/063,615

FILING DATE:

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US-08-695-692B-12
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APPLICANT: Per Anto
APPLICANT: Johan Ho
APPLICANT: Abrahms
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM C compatible
COMPUTER: PC COMPATIBLE
COPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                                                      APPLICATION NUMBER: 9601245-5
FILING DATE: March 29, 1996
ATTORNEY/AGENT INFORMATION:
                                                                                                                                  APPLICATION NUMBER: US/08/695,692B
FILING DATE: AUGUST 12, 1996
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
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TELECOMMUNICATION INFORMATION
TELEPHONE: 608-251-5000
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FILING DATE: 18-AU-
ATTORNEY/AGENT INFORMATION:
Seay, Nicholas J
273
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APPLICATION NUMBER: 1
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APPLICATION NUMBER:
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ELECOMMUNICATION INFORMATION:
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                    NAME: Krieger, Paul E. REGISTRATION NUMBER: 25 REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                 STREET:
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1177 West Loop South, 10th Floor
                                                                                                                                                                                                                                                                                                                                                         USA
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Johan Hansson, Terje Kalland, Lars
Abrahmsen and Goran Forsberg
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28-AUG-1996
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; Sequence 5674, Application US/09107532A
; Patent No. 6583275
; GENERAL INFORMATION:
APPLICANT: Lynn A Doucette-Stamm a
TITLE OF INVENTION: MUCLEIC ACID AN
ENTEROCOCCUS FA
NUMBER OF SEQUENCES: 7310
; CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
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Best Local Similarity
Fatches 6; Conserva
                                                                                                                                           RESULT 14
US-09-107-532A-5674
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US-09-904-196B-7
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                                                                                                                                                                                                                                                                                                                                                            ; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-904-196B-7
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                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS: 15
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 7
LENGTH: 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 7, Applic Patent No. 6555660
                                                                                                                                                                                                                                                                                                          Best
                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: NISSEN, TORBEN LAUESGAARD APPLICANT: ANDERSEN, KIM VILBOUR APPLICANT: HANSEN, CHRISTIAN KARSTEN APPLICANT: MIKKELSEN, JAN MOLLER TITLE OF INVENTION: G-CSF CONJUGATES FILE REPERENCE: 31-000700US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: 713-850-0165
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: DK PA 2000 00943 PRIOR FILING DATE: 2000-06-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: US/09/760,008
PRIOR FILING DATE: 2001-05-11
PRIOR APPLICATION NUMBER: 60/176,376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT FILING DATE: 2001-07-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR FILING DATE: 2000-01-14
PRIOR APPLICATION NUMBER: 60/189,506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 2000-03-15
PRIOR APPLICATION NUMBER: 60/215,644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RIOR FILING DATE: 2000-06-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE:
                                                                                                                                                                                                                                                                                         Local Similarity
nes 6; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEPHONE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: DK PA 2000 00024 FILING DATE: 2000-01-10 APPLICATION NUMBER: DK PA 2000 00341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        55 NKESDD 60
                                                                                                                                                                                                                      14 ALQLLL
                                                                                                                                                                                                                                                      7 ALQLLL 12
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                                                                                                                                                                                                                                                                                    4.4%; Score 6; DB 4 ilarity 100.0%; Pred. No. 39; Conservative 0; Mismatches
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                                       and David Bush
AND AMINO ACID SEQUENCES RELATING TO
FAECIUM FOR DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 4
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RESULT 15
US-08-150-204E-82
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LOCATION: (B) LOCATION 1...84
SEQUENCE DESCRIPTION: SEQ ID NO: 5674:
US-09-107-532A-5674
                                                                                                                                                                                                                                                                                                                                                                 Sequence 82, Application US/08150204E Patent No. 6538126 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 4.4%; Score 6; DB Best Local Similarity 100.0%; Pred. No. 93 Matches 6; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO: 5674:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/085,598
FILING DATE: 14 May 1998
APPLICATION NUMBER: 60/051571
FILING DATE: JULY 2, 1997
ATTORNEY/AGENT INFORMATION:
                                                                                                                                      KIM, Chun Hyung
KIM, Sung Taek
YANG, Jae Young
TITLE OF INVENTION: HEPATITIS C DIAGNOSTICS AND VACCINES
NUMBER OF SEQUENCES: 128
                                                                           CORRESPONDENCE ADDRESS:
ADDRESSEE: YANG, Jae Young
STREET: 386-1, Doryong-dong,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: linear MOLECULE TYPE: protein HYPOTHETICAL: YES ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
LENGTH: 84 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE/DOCKET NUMBER: GTC-012
TELECOMMUNICATION INFORMATION:
TELEPHONE: (781)893-5007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION DATA: US/09/107,532A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 30-Jun-1998 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: CD/ROM ISO9660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             35 ILLTLM 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14 ILLTLM 19
CITY: Daejeon
STATE: Daejeon
COUNTRY: Republic of Korea
ZIP: 305-340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STREET: 100 Beaver Street
CITY: Waltham
STATE: Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: Ariniello, Pamela Deneke REGISTRATION NUMBER: 40,489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Enterococcus faecium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: (781)893-8277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OPERATING SYSTEM: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: PC
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                                                                                                                                                                                                                                           CHOI, Deog Young
SO, Hong Seob
                                                                                                                                                                                                                                                                                   PARK, Young Woo
LIM, Kook Jin
                                                                                                                                                                                                                                                                                                                           Joong Myung
Yong Beom
                                                                             Yuseong-gu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 4;
5. 93;
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TELEFAX: (212) 940-8776
INFORMATION FOR SEQ ID NO: 82
SEQUENCE CHARACTERISTICS:
              COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette, 3.5inch, 1.44MB storage

MEDIUM TYPE: Diskette, 3.5inch, 1.44MB storage

COMPUTER: IBM PC/pentium

OPERATING SYSTEM: Windows

SOFTWARE: Microsoft Word

CURRENT APPLICATION DATA:

APPLICATION DATA:

APPLICATION DATA:

FILING DATE: 20-Apr-1994

CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: KR 91-13601
FILING DATE: 6-AUG-1991
ATTORNEY/AGENT INFORMATION:
NAME: Shahan Islam, Esq.
REGISTRATION NUMBER: 32,507
REFERENCE/DOCKET NUMBER: 2695/FLK
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity es 6; Conserv
                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
ADDRESSEE: YANG, Jae Young
STREET: 386-1, Doryong-dong,
                                                                                                                                                                                                                                                                                                                                                                                 CHOI, Deog Young
SO, Hong Seob
KIM, Chun Hyung
KIM, Sung Taek
YANG, Jae Young
TITLE OF INVENTION: HEPATITIS C DIAGNOSTICS AND VACCINES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
APPLICATION NUMBER: KR 91-9510
FILING DATE: 10-JUN-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: Microsoft Word CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES: 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      64 LLLAIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10 LLLAIL 15
                                                                                                                                                                                                                      STATE: Daejeon
COUNTRY: Republic of Korea
ZIP: 305-340
                                                                                                                                                                                                                                                                                   CITY: Daejeon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/08/150,204E
FILING DATE: 20-Apr-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM PC/pentium OPERATING SYSTEM: Windows
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION: <Unknown>
  APPLICATION NUMBER: KR 91-9510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 106 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDIUM TYPE: Diskette, 3.5inch, 1.44MB storage
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Joong Myung
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100.0%; Pred. No
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Mismatches
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Gaps

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TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO:
US-08-150-204B-83
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US-08-150-204E-89
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Best Local Similarity
Matches 6; Conserv
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GENERAL INFORMATION:
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SEQUENCE CHARACTERISTICS:
INFORMATION FOR SEQ ID NO: 89
                                                                                                                               CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/150,204E

FILING DATE: 20-Apy-1994

CLASSIFICATION: «Unknown»

PRIOR APPLICATION DATA:

APPLICATION NUMBER: KR 91-9510

FILING DATE: 10-JUN-1991

APPLICATION NUMBER: KR 91-13601

FILING DATE: 6-AUG-1991

APPLICATION NUMBER: KR 91-13601

FILING DATE: 6-AUG-1991

ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: KR 91-13601
FILING DATE: 6-AUG-1991
ATTORNEY/AGENT INFORMATION:
NAME: Shahan Islam, Esq.
REGISTRATION NUMBER: 32,507
REFERENCE/DOCKET NUMBER: 2695/FLK
                                                                                                                                                                                                                                                                                                                                                                                       ZIP: 305-340
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.5inch, 1.44MB storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KIM, Chun Hyung
KIM, Sung Taek
YANG, Jae Young
TITLE OF INVENTION: HEPATITIS C DIAGNOSTICS AND VACCINES
NUMBER OF SEQUENCES: 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: YANG, Jae Young
STREET: 386-1, Doryong-dong,
                                                     NAME: Shahan Islam, Esq.
REGISTRATION NUMBER: 32,507
REFERENCE/DOCKET NUMBER: 2695/FLK
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: CHO,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: amino acids
                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC/pentium OPERATING SYSTEM: Windows SOFTWARE: Microsoft Word
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STATE: Daejeon
                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: Republic of Korea ZIP: 305-340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CITY: Daejeon
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                TELEPHONE: (212) 940-8564
TELEFAX: (212) 940-8776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEPHONE:
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SO, Hong Seob
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K, Young Woo
, Kook Jin
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212) 940-8776
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100.0%; Pred. No.
tive 0; Mismatcl
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o. 1.1e+02;
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RESULT 18
US-08-150-204E-91
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                                                                           ; MOLECULE TYPE: protein ; SEQUENCE DESCRIPTION: SEQ ID NO: US-08-150-204E-91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 91, Application Patent No. 6538126
GENERAL INFORMATION:
Query Match 4.4%; Score 6; DB 6
Best Local Similarity 100.0%; Pred. No. 1.:
Matches 6; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
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Best Local Similarity
                                                                                                                                                                                        INFORMATION FOR SEQ ID NO: 91
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette, 3.5inch, 1.44MB storage

COMPUTER: IBM PC/pentium

OPERATING SYSTEM: Windows
SOFTWARE: Microsoft Word

CURRENT APPLICATION NUMBER: US/08/150,204B

FILING DATE: 20-Apr-1994

CLASSIPICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: KR 91-9510

FILING DATE: 10-JUN-1991

APPLICATION NUMBER: KR 91-9510

FILING DATE: 16-AUG-1991

APPLICATION NUMBER: KR 91-13601

FILING DATE: 6-AUG-1991
                                                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
NAME: Shahan Islam, Esq.
REGISTRATION NUMBER: 32,507
REFERENCE/DOCKET NUMBER: 2695/FLK
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
ADDRESSEE: YANG, Jae Young
STREET: 386-1, Doryong-dong, Yuseong-gu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KIM, Chun Hyung
KIM, Sung Taek
KIM, Sung Taek
YANG, Jae Young
TITLE OF INVENTION: HEPATITIS C DIAGNOSTICS AND VACCINES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
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TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                  TOPOLOGY: linear
                                                                                                                                                      LENGTH: 106 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY: Republic of Korea ZIP: 305-340
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TELEFAX: (212) 940-8776
                                                                                                                                                                                                                               CELEFAX:
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Hong Seob
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Yong Beom
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o. 1.1e+02;
                     DB 4; Le
o. 1.1e+02;
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                                         Length 106;
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RESULT 20
US-08-150-204E-93
; Sequence 93, Application US/08150204E
; Patent No. 6538126
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                              TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO:
US-08-150-204E-92
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US-08-150-204B-92
                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 6; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO: 92
                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Shahan Islam, Esq. REGISTRATION NUMBER: 32,507 REFERENCE/DOCKET NUMBER: 269 TELECOMMUNICATION INFORMATION: TELEPHONE: (212) 940-8564 TELEFAX: (212) 940-8776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER: KR 91-9510
FILING DATE: 10-JUN-1991
APPLICATION NUMBER: KR 91-13601
FILING DATE: 6-AUG-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette, 3.5inch, 1.44MB storage
COMPUTER: IBM PC/pentium
OPERATING SYSTEM: Windows
SOFTWARE: Microsoft Word
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/150,204E
FILING DATE: 20-Apr-1994
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
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KIM, Sung Taek
YANG, Jae Young
TITLE OF INVENTION: HEPATITIS C DIAGNOSTICS AND VACCINES
NUMBER OF SEQUENCES: 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
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                                                                                                                             64 LLLAIL
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STATE: Daejeon
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STREET: 386-1, Doryong-dong,
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PARK, Young Woo
LIM, Kook Jin
                                                                                                                             69
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SO, Hong Seob
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100.0%; Pred. No. 1.:
tive 0; Mismatches
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lo. 1.1e+02;
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Query Match
Best Local Similarity
Watches 6; Conserva
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                                                                                                                                                                                                                                                             US-08-150-204E-120
                                                                                                                                                                                                                                                                                  RESULT 21
                                                                                                                                                                                      Sequence 120, Applicating Patent No. 6538126
GENERAL INFORMATION:
APPLICANT: CHO,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: (212) 940-8776
INFORMATION FOR SEQ ID NO: 93
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: KR 91-9510
FILING DATE: 10-JUN-1991
APPLICATION NUMBER: KR 91-13601
FILING DATE: 6-AUG-1991
ATTORNEY/AGENT INFORMATION:
NAME: Shahan Islam, Esq.
REGISTRATION NUMBER: 32,507
REFERENCE/DOCKET NUMBER: 2695/FLK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/150,204E
FILING DATE: 20-Apr-1994
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: Republic of Korea
ZIP: 305-340
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.5inch, 1.44MB storage
COMPUTER: IBM PC/pentium
OPERATING SYSTEM: Whindows
SOFTWARE: Microsoft Word
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELECOMMUNICATION INFORMATION:
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LEE, Yong Beom
PARK, Young Woo
LIM, Kook Jin
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KIM, Chun Hyung
KIM, Sung Taek
KIM, Sung Taek
YANG, Jae Young
TITLE OF INVENTION: HEPATITIS C DIAGNOSTICS AND VACCINES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES: 128
CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                        64 LLLAIL 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 106 amino acids TYPE: amino acid TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STATE: Daejeon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE: YANG, Jae Young STREET: 386-1, Doryong-dong,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEPHONE: (212) 940-8564
                                                                                                                                                                                                                                            Application US/08150204E
                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
CHOI, Deog Young
SO, Hong Seeb
KIM, Chun Hyung
KIM, Sung Taek
YANG, Jae Young
INVENTION: HEPATITIS C DIAGNOSTICS AND VACCINES
F SEQUENCES: 128
                                                                                                                              PARK, Young Woo
LIM, Kook Jin
                                                                                                                                                                                                                                                                                                                                                                                                          / 100.0%; FI
                                                                                                                                                                     Yong Beom
                                                                                                                                                                                    Joong Myung
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ong Seob
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No. 1.1e+02;
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                                                                                                                        ; ORGANISM: Chlamydia pneumoniae
US-09-198-452A-450
                      Query Match
Best Local Similarity luv.
                                                                                                                                              APPLICANT: Griffais, R.

APPLICANT: Griffais, R.

TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, fragments TITLE OF INVENTION: thereof and uses thereof, in particular for the diagnosis, preve TITLE OF INVENTION: and treatment of infection PILE REFERENCE: 9710-003-999

CURRENT APPLICATION NUMBER: US/09/198,452A

CURRENT FILING DATE: 1998-11-24

NUMBER OF SEQ ID NOS: 6849

SEQ ID NO 450

LENGTH: 113

TYPE: PRT
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atent No. 6559294
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC/pentium
OPERATING SYSTEM: Windows
SOFTWARE: Microsoft Word
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/150,204E
FILING DATE: 20-Apr-1994
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OTHER INFORMATION: JHCV-NCI SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
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COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
12 LAILLT 17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: KR 91-9510
FILING DATE: 10-UUN-1991
APPLICATION NUMBER: KR 91-13601
FILING DATE: 6_AUG-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STATE: Daejeon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 106 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDIUM TYPE: Diskette, 3.5inch, 1.44MB storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY: Républic of Korea
ZIP: 305-340
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             386-1, Doryong-dong,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.4%; Score 6; DB 4; Lei 100.0%; Pred. No. 1.1e+02; Live 0; Mismatches 0;
                                                    4.4%; Score 6; DB . 100.0%; Pred. No. 1.: tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     940-8776
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2695/FLK
                                           DB 4; 1.2e+02; 0;
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                                                                                    Length 113;
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RESULT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
FILING DATE: 11-AUG-1994
ATTORNEY/AGENT INFORMATION:
NAME: Resnick, David S.
REGISTRATION NUMBER: 34,235
REFERENCE/DOCKET NUMBER: 4575
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-523-3400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: JP 7-093989
FILING DATE: 19-AUG-1995
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: G PROTEIN COUPLED RECEPTOR PROTEIN, TITLE OF INVENTION: PRODUCTION, AND USE THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                       APPLICATION NUMBER: JP 6
FILING DATE: 11-AUG-1945
PRIOR APPLICATION DATA:
                                                                                                                                                                                          FILING DATE: 11-AUG-
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 16-MAR-PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: US
ZIP: 02109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: FILING DATE: 14-SEI CLASSIFICATION: 536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CITY: Boston
STATE: MA
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                                                                                                                                                                                                                                                                APPLICATION NUMBER: JP 6-236356 FILING DATE: 30-SEP-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: JP 7-057186 FILING DATE: 16-MAR-1995
                                                                                                    APPLICATION NUMBER: JP 6 FILING DATE: 11-AUG-1994
                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: JP 6-236357
FILING DATE: 30-SEP-1994
                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: JP 6: FILING DATE: 28-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER:
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6114139
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Ohgi, Kazuhiro
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i, Tetsuya
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Masaki
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INFORMATION FOR SEQ ID NO:

28:

SEQUENCE CHARACTERISTICS

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RESULT 24
US-08-776-971-23
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Best Local Similarity
                                                     TELEFAX: 617-523-6440 INFORMATION FOR SEQ ID NO: 23: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRANDEDNESS:
TOPOLOGY: linear
MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ENGTH:
                                                                                                                                                                                                 APPLICATION NUMBER: JP 8/211805
FILING DATE: 12-AUG-1996
APPLICATION NUMBER: JP 8/246573
FILING DATE: 18-SEP-1996
ATTORNEY/AGENT INFORMATION:
                                                                                                                             REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/JP96/03821
FILING DATE: 28-DEC-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: USA
ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Diske
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AL INFORMALL.
APPLICANT: Hinuma, Suu,
APPLICANT: Habata, Yugo
Habata, Yugo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
ADDRESSE: DIKE, BRONSTEIN, ROBERTS & CUSHMAN, LLP STREET: 130 Water Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Fukusumi, Shoji
Kitada, Chieko
TITLE OF INVENTION: POLYPROTEINS, THEIR PRODUCTION AND USE
NUMBER OF SEQUENCES: 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11 LLAILL 16
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TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                               NAME: Conlin, David G. REGISTRATION NUMBER: 2
                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US/08/776,971B
FILING DATE: 06-Feb-1997
CLASSIFICATION: <Unknown>
                                    LENGTH: 126 amino acids
                                                                                                             TELEPHONE: 617-523-3400
                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: JP 7/343371
FILING DATE: 28-DEC-1995
APPLICATION NUMBER: JP 8/59419
FILING DATE: 15-MAR-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM compatible OPERATING SYSTEM: DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: FastSEQ for Windows Version 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CITY: Boston
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llarity 100.0%; Pred. No
Conservative 0; Mismat
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Fujii, Ryo
Fujii, Shoji
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Mismatches
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o. 1.3e+02;
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US-09-461-436B-28
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity hes 6; Conserv
               NAME: CONLIN, DAVID G.
REGISTRATION NUMBER: «Unknown»
REFERENCE/DOCKET NUMBER: 45753
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-439-4444
TELEPAX: 617-439-4170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
                                                                                                                             ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ryo Pujii
TITLE OF INVENTION: G Protein Coupled Receptor Protein,
Production, And Use Thereof
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
ADDRESSEE: Edwards & Angell, LLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES: 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
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                                                                                                                                             APPLICATION NUMBER: 6-189272
FILING DATE: 11-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 14-Dec-1999 CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 08/513,974
FILING DATE: 14-SEP-1995
APPLICATION NUMBER: PCT/JP95/01599
FILING DATE: 10-AUG-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STATE: MA
                                                                                                                                                                                FILING DATE: 11-AUG-1994
APPLICATION NUMBER: 6-189273
FILING DATE: 11-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/09/461,436B
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                                                                                                                                                                                                                                        PPLICATION NUMBER: 6-189274
                                                                                                                                                                                                                                                         FILING DATE: 30-SEP-1994
APPLICATION NUMBER: 6-236356
FILING DATE: 30-SEP-1994
                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                       'ILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 7-007177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 7-093989
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                                                                                                                                                                                                                                                                                                                                                                                         PPLICATION NUMBER: 6-326611
                                                                                                                                                                                                                                                                                                                                                                                                                                               PPLICATION NUMBER: 7-057186
ILING DATE: 16-MAR-1995
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100.0%; Pred. No.
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Query Match
Best Local Similarity
Matches 6; Conserve
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US-09-107-532A-6426
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; SEQUENCE DESCRIPTION: SEQ ID NO: 28.
US-09-461-436B-28
                                                                                    ; NAME/KBY: misc feature
LOCATION: (B) LOCATION 1...129
; SEQUENCE DESCRIPTION: SEQ ID NO: 6426:
US-09-107-532A-6426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 6426, Application US/09107532A
Patent No. 6583275
Best Local Similarity
Matches 6; Conserv
                                             Query Match
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GENERAL INFORMATION:

APPLICANT: Lynn A Doucette-Stamm and David Bush

APPLICANT: Lynn A Doucette-Stamm and David Bush

TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO

ENTEROCOCCUS FAECIUM FOR DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO: 6426: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/09/107,532A
FILING DATE: 30-Jun-1998
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/085,598
FILING DATE: 14 May 1998
APPLICATION NUMBER: 60/051571
FILING DATE: July 2, 1997
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                               NAME: Ariniello, Pamela Deneke REGISTRATION NUMBER: 40,489
REPERENCE/DOCKET NUMBER: GTC-012
TELECOMMUNICATION INFORMATION:
TELEPHONE: (78)1893-5007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION DATA:
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MEDIUM TYPE: CD/ROM ISO9660
                                                                                                                                                                                                                 ORIGINAL SOURCE:
                                                                                                                                                                                                                                  MOLECULE TYPE: protein HYPOTHETICAL: YES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
ADDRESSEE: GENOME THERAPEUTICS CORPORATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                               LENGTH: 129 amino acids TYPE: amino acid
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                                                                                                                                                                                                                                                                           TOPOLOGY: linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OPERATING SYSTEM: <Unknown>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: linear
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  4.4%; Score 6; DB 4; Le ilarity 100.0%; Pred. No. 1.3e+02; Conservative 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                  (781)893-8277
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100.0%; Pred. No. 1.
tive 0; Mismatches
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o. 1.3e+02;
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                                             Length 129;
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Query Match
Best Local Similarity
Watches 6; Conserve
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US-09-252-991A-25272
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FILING DATE: 536
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/JP95/01599
FILING DATE: 10-AUG-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 7-093989
TTTING DATE: 19-AUG-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEQ ID NO 25272
SEQ ID NO 25272
TENGTH: 132
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GENERAL INFORMATION:
                                                                                                                                                 COUNTRY: USA
ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: BC-DOS/MS-DOS
SOPTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION UNMBER: US/08/513,974B
FILING DATE: 14-SEP-1995
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TITLE OF INVENTION: NUCLBIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
EILE REFERENCE: 107196.136
CURRENT APPLICATION NUMBER: US/09/252,991A
CURRENT FILING DATE: 1999-02-18
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR PILING DATE: 1998-02-18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
ORGANISM: Pseudomonas aeruginosa
                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: DIKE, BRONSTEIN, ROBERTS & CUSHMAN, LLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Ohgi, Kazuhiro
TITLE OF INVENTION: G PROTEIN COUPLED RECEPTOR PROTEIN,
TITLE OF INVENTION: PRODUCTION, AND USE THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES:
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100.0%; Pred. No.
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c. 1.4e+02;
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FILING DATE: 16-MAR-PRIOR APPLICATION DATA:

16-MAR-1995

JP 7-057186

APPLICATION NUMBER:

20-JAN-1995

JP 7-007177

APPLICATION NUMBER:

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Best Local (
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                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                              APPLICANT:
                                                                                                                              CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE: protein
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APPLICATION NUMBER: JP 6-
FILING DATE: 11-AUG-1994
ATTORNEY/AGENT INFORMATION:
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PRIOR APPLICATION NUMBER: JP 6-189273
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                 NUMBER OF SEQUENCES:
                                                                                                                                                         APPLICANT: Fukusumi, Shoji
APPLICANT: Ohgi, Kazuhiro
TITLE OF INVENTION: G PROTEIN COUPLED RECEPTOR PROTEIN,
TITLE OF INVENTION: PRODUCTION, AND USE THEREOF
                                                                                                                                                                                                                                              APPLICANT:
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APPLICATION NUMBER:
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PRIOR APPLICATION DATA:
APPLICATION NUMBER:
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PRIOR APPLICATION DATA:
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PRIOR APPLICATION DATA:
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REFERENCE/DOCKET NUMBER: 45
                                                                                                STREET:
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                                                   COUNTRY:
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                                                                                                                 ADDRESSEE:
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OGY: linear
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                                                                                                  130 Water Street
                                                USA
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Ohtaki, Tetsuya
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                                                                                                               DIKE, BRONSTEIN, ROBERTS & CUSHMAN, LLP
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Sequence 106, Applicat: Patent No. 6228984 GENERAL INFORMATION:

Application US/08776971B

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APPLICANT: Hinuma, Shuji Habata, Yugo Kawamata, Yuji

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RESULT 30
US-08-776-971-106
                                                                                                               Query Match
Best Local Similarity
Matches 6; Conserve
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                                                                                                                                                                                              ; MOLECULE TYPE: peptide US-08-513-974B-369
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOSTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/513,974B
FILING DATE: 14-SEP-1995
CLASSIFICATION: 536
CLASSIFICATION: 536
                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: 45
TELECOMMUNICATION INFORMATION:
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NAME: Resnick
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APPLICATION NUMBER: PCT/JP95/01599
FILING DATE: 10-AUG-1995
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PRIOR APPLICATION DATA:

APPLICATION UNMERR: JP 6-236357

FILING DATE: 30-SEP-1994
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STRANDEDNESS:
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                                                                 87 LLAILL 92
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                                                                                                                                                                                                                                                                                                               SEQ
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11-AUG-1945
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                                                                                                                                                                                                                                                                                                               369
                                                                                                                                Score 6; DB 3; Le
; Pred. No. 1.5e+02;
0; Mismatches 0;
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                                                                                                                                                              Length 144;
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RESULT 31
US-08-776-971-109
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                                                                                                                                                     Sequence 109, Application Patent No. 6228984
GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                              Query Match
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INFORMATION FOR SEQ ID NO: 106:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: JP 8/211805
FILING DATE: 12-AUG-1996
APPLICATION NUMBER: JP 8/246573
FILING DATE: 18-SEP-1996
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
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MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE DESCRIPTION: SEQ ID NO: 106:
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ADDRESSEE: DIKE, BRONSTEIN, ROBERTS & CUSHMAN, LLP
STREET: 130 Water Street
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Kitada, Chieko
TITLE OF INVENTION: POLYPROTEINS, THEIR PRODUCTION AND USE
NUMBER OF SEQUENCES: 140
       TITLE OF
                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FRAGMENT TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                     87 LLAILL 92
                                                                                                                                                                                                                                                                                                                      11 LLAILL 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: Conlin, David G.
REGISTRATION NUMBER: 27,026
REFERENCE/DOCKET NUMBER: 47176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: PCT/JP96/03821
FILING DATE: 28-DEC-1996
APPLICATION NUMBER: JP 7/343371
FILING DATE: 28-DEC-1995
APPLICATION NUMBER: JP 8/59419
FILING DATE: 15-MAR-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/08/776,971B FILING DATE: 06-Feb-1997 CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ZIP: 02109
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEPHONE: 617-523-3400
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ENGTH: 144 amino acids
                                                                                                                                                                                            Application US/08776971B
                                                                                                                                                                                                                                                                                                                                                             Conservative
Fukusumi, Shoji
Kitada, Chieko
INVENTION: POLYPROTEINS, THEIR PRODUCTION AND USE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Boston
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                                                                                               Habata, Yugo
Kawamata, Yuji
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                                                                         Hosoya, Masaki
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                           Ryo
i Shoji
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Pred. No.
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lo. 1.5e+02;
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Best Local Similarity
Watches 6; Conserve
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Patent No. 5919658
                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INFORMATION FOR SEQ ID NO: 109: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                        APPLICANT: LI, HAODONG
APPLICANT: YU, GUO-LIANG
APPLICANT: GENTZ, REINER L
TITLE OF INVENTION: HUMAN CYSTATIN F
NUMBER OF SEQUENCES: 11
                                                                                                                                                     CORRESPONDENCE ADDRESS:
       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                    APPLICANT: NI, JIAN
                                                            COUNTRY:
                                                                                                                  STREET:
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APPLICATION NUMBER: US/08/776,971B
FILING DATE: 06-Feb-1997
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: linear SEQ ID NO: 109:
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-523-3400
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COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
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                                            20850
                                                                                                 ROCKVILLE
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TYPE: amino acid
TYPE: smino acid
STRANDEDHIS: single
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REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: JP 8/211805
FILING DATE: 12-AUG-1996
APPLICATION NUMBER: JP 8/246573
FILING DATE: 18-SEP-1996
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OPERATING SYSTEM: DOS
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STREET: 130 Water Street
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: PCT/JP96/03821 FILING DATE: 28-DEC-1996
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CITY: Boston
                                                                                                                      9410 KEY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                   HUMAN
       Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FastSEQ for Windows Version 2.0
                                                                                                                    GENOME SCIENCES, INC. WEST AVENUE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4.4%; Score 6; DB 3; Length 144; 100.0%; Pred. No. 1.5e+02; tive 0; Mismatches 0; Indels
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Gaps

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JS-08-832-535-11
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Best Local Similarity
                                                 TELEPAX: 415-845-4166
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                       APPLICATION NUMBER: US/08/791
FILING DATE: Filed Herewith
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
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NAME: KIMBALL, PAUL C.
REGISTRATION NUMBER: 34,610
REFERENCE/DOCKET NUMBER: PF26
TELECOMMUNICATION INFORMATION:
TELEPHONE: (201) 994-1700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: (201) 994-1744 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                    SOFTWARE: FastSEQ for Windows Version 2.0 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Bandman, Olga
APPLICANT: Goli, Surya K.
TITLE OF INVENTION: NOVEL H.
TITLE OF INVENTION: PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: Patentin Release #1.0, CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/832,535
FILING DATE: 03-APR-1997
                                                                                                                         TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
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CORRESPONDENCE ADDRESS:
                                                                                                                                       NAME: Billings, Lucy J.
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF-0193
                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM Compatible OPERATING SYSTEM: DOS SOFTWARE: FastSEQ for Wir
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CITY: Palo Alto
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STRANDEDNESS: sir
STRANDEDNESS:
                                                                                                      TELEPHONE:
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                               ENGTH:
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                               146 amino acids
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3174 Porter Drive
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SYSTEM: PC-DOS/MS-DOS
                                                                                                      415-855-0555
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)N: 435
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N: NOVEL HUMAN CYSTATIN-LIKE
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100.0%; Pred. No.
ative 0; Mismatc
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o. 1.5e+02;
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                                                          Matches
                                                                                     Query Match
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Best Local Similarity 100
Matches 6; Conservative
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                                                                                                                                                                                                                              TELEPAX: 301 309 8512 3: INFORMATION FOR SEQ ID NO: 3: SEQUENCE CHARACTERISTICS: LENGTH: 146 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: linea:
IMMEDIATE SOURCE:
LIBRARY: GenBan
CLONE: 181387
                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/744,138
                                                                                                                                            HYPOTHETICAL: N
ORIGINAL SOURCE:
                                                                                                                                                                     MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER: PF
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Brookes, A. Anders
REGISTRATION NUMBER: 36,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: Human Cystatin E NUMBER OF SEQUENCES: 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
                                                        Local Similarity
nes 6; Conserv
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TOPOLOGY: linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET:
                                                                                                                              INDIVIDUAL ISOLATE: Cystatin C
                                                                                                                                                                                                                  TYPE: amino acid
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10 LLLAIL 15
                   10 LLLAIL 15
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Rockville
Maryland
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                                                          Conservative
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Ni, Jian
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GenBank
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                                                                       100.0%;
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                                                                       4.4%; Score 6;
100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                               36,373
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                                                          0; Mismatches
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                                                                       DB 3; Leno. 1.5e+02;
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                                                        Gaps
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RESULT 35 US-09-019-485-4

Sequence 4, Application US/09019485

Patent No.

6066617

GENERAL INFORMATION:

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; LENGTH: 146 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-019-485-4
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Best Local Similarity
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                       APPLICANT: Bandman, Olga
APPLICANT: Goli, Surya K.
TITLE OF INVENTION: NOVEL HUMAN CYSTATIN-LIKE
TITLE OF INVENTION: PROTEIN
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
TOCYTE Pharmaceuticals, Inc.
           ZIP: 94304

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: PastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/019,485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Benson, Robert H.
REGISTRATION NUMBER: 30,446
REFERENCE/DOCKET NUMBER: PF/
TELECOMMUNICATION INFORMATION:
TELEPHONE: 3013098504
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CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
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APPLICANT: Gentz, Reiner
APPLICANT: Ni, Jian
TITLE OF INVENTION: Cystatin F
NUMBER OF SEQUENCES: 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET: >---
STREET: Y---
STRY: Rockville
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                                                                                                                                                          CITY: Palo Alto
STATE: CA
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                                                                                                                                           COUNTRY:
                                                                                                                                                                                                ADDRESSEE: Incyte Pharmaceuticals, Inc
STREET: 3174 Porter Drive
APPLICATION NUMBER: US/09/314,777
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                                                                                                                                             USA
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100.0%; Pr
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Pred. No.
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o. 1.5e+02;
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                                                                                                                                RESULT 38
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                                                            Sequence 6, Application US/09617302
Patent No. 6245529
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                          SOPTWARE: FASTSEQ for Windows Version 3.0
SEQ ID NO 6
LENGTH: 146
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 6, Application US/09431480
Patent No. 6235708
GENERAL INFORMATION:
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Best Local Similarity
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Holloway, James L.
APPLICANT: Feldhaus, Andrew
TITLE OF INVENTION: TESTIS SPECIFIC CYSTATIN-LIKE PROTEIN CYSTATIN T
FILE REFERENCE: 98-72
CURRENT APPLICATION NUMBER: US/09/431,480
CURRENT FILING DATE: 1999-11-01
                                                                                                                                                                                                                                                                                                                                                                                                                                              EARLIER APPLICATION NUMBER: 60/109,217
EARLIER FILING DATE: 1998-11-20
EARLIER APPLICATION NUMBER: 60/156,382
                                                                                                                                                                                                                                                                                                                                                                                                               EARLIER FILING DATE: 1999-09-28 NUMBER OF SEQ ID NOS: 22
          APPLICANT: Holloway, James L.
APPLICANT: Feldhaus, Andrew
TITLE OF INVENTION: TESTIS SPECIFIC CYSTATIN-LIKE PROTEIN CYSTATIN T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: 415-845-4166 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Billings, Lucy J.
NAME: Billings, Lucy J.
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF-0
TELECOMMUNICATION INFORMATION:
FILE REPERENCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 146 amino acid
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APPLICATION NUMBER:
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STRANDEDNESS: sir
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98-72 C1
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CURRENT FILING DATE: 2000-07-17
PRIOR APPLICATION NUMBER: 09/431,480
PRIOR FILING DATE: 1999-11-01
PRIOR APPLICATION NUMBER: 60/109,217
PRIOR APPLICATION NUMBER: 60/109,217
PRIOR FILING DATE: 1998-11-20
PRIOR APPLICATION NUMBER: 60/156,382
PRIOR FILING DATE: 1999-09-28
NUMBER OF SEQ ID NOS: 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: |
SEQ ID NO 6
LENGTH: 14
TYPE: PRT
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GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Homo sapiens -09-617-302-6
                                                 TELEFAX: 301 309 8512
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 146 amino acid
                                                                                                                                                                                                                                    CLASSIFICATION:
PRIOR APPLICATION NUMBER: 08/744,138
APPLICATION NUMBER: 08/744,138
FILING DATE: 05-NOV-1996
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/461,030
FILING DATE: 05-JUN-1995
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDIUM TYPE: Floppy
                                                                                                                                                             ATTORNEY/AGENT INFORMATION:
NAME: Brookes, A. Anders
REGISTRATION NUMBER: 36,373
REFERENCE/DOCKET NUMBER: PF
                                                                                                                            TELEPHONE: 301 309 8504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/09/241,376 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET: 9410 Key West Avenue CITY: Rockville STATE: Maryland
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
nes 6; Conserv
                                  TYPE: amino acid
TOPOLOGY: 1i
                                                                                                                           TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY:
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                                                   146 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.4%; Score 6; DB 3; Le larity 100.0%; Pred. No. 1.5e+02; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Yu, Guo-Liang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rosen, Craig A.
linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human Genome Sciences, Inc.
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Query Match
Best Local Similarity
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US-09-528-436B-3
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Best Local Similarity 100.
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQ ID NOS: 16
SOFTWARE: PatentIn version 3.2
SEQ ID NO 3
NUMBER OF SEQ ID NOS: 84
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
APPLICANT: Li, et al.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 3, Application US/09528436B Patent No. 6576745
                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 47,
                                                                                                                                                                                                                                                                                                                                                                                  Patent No. 6586185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/09/528,436B
CURRENT FILING DATE: 2000-03-17
PRIOR APPLICATION NUMBER: 09/019,485
PRIOR FILING DATE: 1998-01-29
PRIOR APPLICATION NUMBER: 08/832,535
PRIOR PILING DATE: 1999-04-03
PRIOR PILING DATE: 1999-04-03
PRIOR APPLICATION NUMBER: 60/014,795
PRIOR FILING DATE: 1996-04-03
                                                    CURRENT APPLICATION NUMBER: US/09/886,319A CURRENT FILING DATE: 2001-06-20 PRIOR APPLICATION NUMBER: US 60/222,081 PRIOR FILING DATE: 2000-08-01 PRIOR APPLICATION NUMBER: DE 10030149.5 PRIOR FILING DATE: 2000-06-20
                                                                                                                                                                                                                                                              APPLICANT: Wolf, Eckard
APPLICANT: Werner, Sabine
APPLICANT: Halle, Jorn-Peter
APPLICANT: Regenbogen, Johann
APPLICANT: Goppelt, Andreas
                                                                                                                                                                    APPLICANT: Goppelt, Andreas
TITLE OF INVENTION: Use of Polypeptides or Nucleic Acids for
TITLE OF INVENTION: the Diagnosis or Treatment of Skin Disorders and Wound
TITLE OF INVENTION: Healing and for the Identification of Pharmacologically
TITLE OF INVENTION: Active Substances
FILE REFERENCE: 50125/014002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: Human Cystatin FILE REFERENCE: PF265P1D1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HYPOTHETICAL: NO
ORIGINAL SOURCE:
INDIVIDUAL ISOLATE: Cystatin C
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                                                                                                                                                                                                                                                                                                                                                                                                  Application US/09886319A
                                                                                                                                                                                                                                                                                Regenbogen, Johannes
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ative 0; Mismatches
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Pred. No.
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RESULT 43
5432264-6
;Patent No. 5432264
; APPLICANT: GRUBB, ANDERS;LUNDWALL, AKE;ABRAHAMSON, MAGNUS;
;DALBOGE, HENRIK
; TITLE OF INVENTION: RECOMBINANT 3-DES-OH-CYSTATIN C PRODUCED
;BY EXPRESSION IN A PROCARYOTIC HOST CELL
; NUMBER OF SEQUENCES: 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-886-319A-47
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                                                                                                                                                                                                                                                                                                                                     PCT-US95-07135-9
                                                                                                                                                                                                                                                       Query Match 4.4%; Score 6; DB 5; Le Best Local Similarity 100.0%; Pred. No. 1.5e+02; Matches 6; Conservative 0; Mismatches 0;
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Matches 6; Conservative 0; Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: 201-994-1744
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS
LENGTH: 146 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION UMBER: PCT/US95/07135 FILING DATE: 05-JUN-1995 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET: 6 CONTROL OF TATE: New Jersey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
NAMES: MULLINS, J.G.
REGISTRATION NUMBER: 33,073
REFERENCE/DOCKET NUMBER: 32!
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: CARELLA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE: protein
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                                                                                                                                                                                                                                                                                                                                                                       STRANDEDNESS:
TOPOLOGY: 11
                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEB: CARELLA, BYRNE, BAIN, GILFILLAN, ADDRESSEB: CECCHI, STUART & OLSTEIN STREET: 6 Becker Farm Road
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                                                                                                                                                                                                                          10 LLLAIL 15
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T: Rosen, Craig
INVENTION: HUMAN CYSTATIN B
                                                                                                                                                                                                                                                                                                                                                                                                                           146 amino acids
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Yu, Guo-Liang
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Query Match
Best Local Similarity
Matches 6; Conserve
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                                                            Matches
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                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                              TELEFAX: (415) 397-8338
[INFORMATION FOR SEQ ID NO: 49:
SEQUENCE CHARACTERISTICS:
LENGTH: 161 amino acids
                                                                                                                                     TOPOLOGY: W
                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
NAME: Carroll, Peter G.
REGISTRATION NUMBER: 32,837
                                                                                                                                                                                                                                                                                                                                                                                                     MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Weiner, APPLICANT: Turner,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                            TELECOMMUNICATION INFORMATION:
                                                       Local Similarity les 6; Conserv
                                                                                                                                                               STRANDEDNESS:
                                                                                                                                                                                   TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET: 220 Montgomery Street, Suite 2200 CITY: San Francisco STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 440,221 FILING DATE: 21-NOV-1989 APPLICATION NUMBER: 297,198
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FILING DATE: 13-AUG-1992
                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/0 FILING DATE: 28-MAY-1998 CLASSIFICATION: 435
                                                                                                                                                                                                                                                               TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 20-MAY-1988
                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE:
140
                           94 QKPETT 99
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                                                            Conservative
                                                                                                                                                       unknown
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                                                                                                                                                                                                                                                               (415) 705-8410
                                                                                                                                   protein
145
                                                                                                                                                                      not relevant
                                                                  100.0%;
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COMPOSITIONS AND METHODS FOR PROTEIN
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                                                                                           4.48;
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                                                            0; Mismatches
                                                                         Score 6; DB 4; Length 161; Pred. No. 1.6e+02;
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o. 1.5e+02;
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RESULT 45

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Query Match
Best Local Similarity
Thes 6; Conserve
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Matches
                                                                                                                                                                         SEQ ID NO 46
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                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                     Sequence 46, Application US/09325932A
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                                                                                                             -09-325-932A-46
                                                                                                                                                                                      CURRENT FILING DATE: 199-06-04
NUMBER OF SEQ ID NOS: 206
SOFTWARE: FastSEQ for Windows W
                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/09/325,932A
                                                                                                                                                                                                                                                       APPLICANT: Flinn, Barry
APPLICANT: Lasham, Annette
TITLE OF INVENTION: Compositions affecting programmed cell
TITLE OF INVENTION: death and their use in the modification of forestry plant devel
FILE REFERENCE: 1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/443,041A
CURRENT FILING DATE: 1999-11-18
PRIOR APPLICATION NUMBER: 60/109,283
PRIOR FILING DATE: 1998-11-20
NUMBER OF SEQ ID NOS: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Famodu, Omolayo O.
APPLICANT: Orozco, Buddy
APPLICANT: Rafalski, Antoni
APPLICANT: Shen, Jennie
                                                                                                                       LENGTH: 199
TYPE: PRT
ORGANISM: Pinus radiata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: Microsoft Office 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILE REFERENCE:
                                                                                                                                                                                                                                                                                                                                                        tent No. 6451604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: Sterol Metabolism Enzymes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: UNSURE
LOCATION: (159)
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NAME/KEY: UNSURE
LOCATION: (77)
OTHER INFORMATION: ANY AMINO ACID
NAME/KEY: UNSURE
LOCATION: (95)
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TYPE: PRT
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les 6; Conservative
11 LLAILL
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Rafalski, Antoni
Shen, Jennie
                                              Conservative
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                                         100.0%; **
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100.0%; Pr
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Pred. No.
                                                Mismatches
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lo. 1.9e+02;
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                                                                          Length 199;
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RESULT 47
US-08-792-019B-10
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Sequence 10, App...
No. 6054294
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Patent No. 5741772
GEMERAL INFORMATION:
APPLICANT: CHANG, MING-SHI
                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                          GENERAL INFORMATION:
APPLICANT: CHANG, I
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER: A INFORMATION FOR SEQ ID NO: 10: SEQUENCE CHARACTERISTICS:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ZIP: 91320
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                      NUMBER OF SEQUENCES: 16
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
NAME: COCK, ROBERT R.
REGISTRATION NUMBER: 31,602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: FILING DATE: 03-FEB CLASSIFICATION: 514
                                                                                             STREET: ONE AMGEN CITY: THOUSAND OAKS
                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
les 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: amino acids
                                                              COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRANDEDNESS: single TOPOLOGY: linear
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                                                                                                                             ADDRESSEE:
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1..174
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                                                                                                                             AMGEN INC
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                                                                                                                                                                           NEUROTROPHIC FACTOR NNT-1
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; Pred. No. 2e+0;
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les 0; Indels
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OPERATING SYSTEM: PC-DOS/MS-DOS

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RESULT 49
US-09-016-534-10
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                                 CLASSIFICALION DATA:
PRIOR APPLICATION NUMBER: US 08/792,019
APPLICATION NUMBER: US 08/792,019
FILING DATE: 03-FEB-1997
ATTORNEY/AGENT INFORMATION:
NAME: COOK, ROBERT R.
NAME: COOK, ROBERT: 31,602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 10, Application US/09016534 Patent No. 6143874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
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APPLICANT: CHANG,
APPLICANT: BLLIOT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION: 536
PRIOR APPLICATION NUMBER: US 08/792,019
PILLING DATE: 03-FEB-1997
ATTORNEY/AGENT INFORMATION:
NAME: COOK, ROBERT R.
                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                    SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: SENALDI, GIORGIO
TITLE OF INVENTION: THE NEUROTROPHIC FACTOR NNT-1
NUMBER OF SEQUENCES: 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
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SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                     STATE: CA
COUNTRY: US
ZIP: 91320
            REGISTRATION NUMBER: 31,60:
REFERENCE/DOCKET NUMBER: A
DRWATION FOR SEQ ID NO: 10:
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nes 6; Conservative 0; Mismatches
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STRANDEDNESS: sir
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ONE AMGEN CENTER
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SENALDI, GIORGIO
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1..174
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-30..0
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Pred. No.
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No. 2e+02;
No. 2a 0; Indels
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Query Match
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                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Patent No. 6204364
                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/753,178
APPLICATION NUMBER: US 07/753,178
FILING DATE: 30-AUG-1991
ATTORNEY/AGENT INFORMATION:
NAME: MUTASHIGE, Kate H.
REGISTRATION NUMBER: 29,959
REFERENCE/DOCKET NUMBER: 24455-20001.00
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                              TELEX: 706141
INFORMATION FOR SEQ ID NO:
                                                                                                                           SEQUENCE CHARACTERISTICS:
LENGTH: 204 amino acids
TYPE: amino acid
STRANDENNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Todaro,
APPLICANT: Rose, Ti
TITLE OF INVENTION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE: Morrison & Foerster
STREET: 545 Middlefield Road, Suite 200
CITY: Menlo Park
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: Region LOCATION: -30..0
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STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                            TELEPAX:
                                                                                                                                                                                                                                           TELEPHONE:
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                                                                                                               TOPOLOGY:
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7 ALQLLL 12
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415-327-2951
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HYBRID CYTOKINES
                            4.4%; Score 6; DB 3;
.00.0%; Pred. No. 2e+0;
.ve 0; Mismatches
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100.0%; Pred. No. 2e+02;
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                                                 2e+02;
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14 ALQLLL 19

Search completed: January 21, 2004, 12:28:29 Job time : 22 secs

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OM protein protein search, using 38 mode1

Run on: January 21, 2004, 12:04:49; Search time 24.7484 Seconds (without alignments) 532.362 Million cell updates/sec

US-09-941-314-2 736

Title: Perfect score: Sequence:

MAEPWQALQLLLAILLTLMA.....VFAVPWFEQYKILNKSCSSD 137

Scoring table: BLOSUM62 Gapop 10.0 , Gapext 0.5

Searched:

283308 seqs, 96168682 residues

Total number of hits satisfying chosen parameters: 283308

Minimum DB seq Maximum DB seq length: 0 length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 s

summaries

Database

PIR_76:*
1: pir1:*
2: pir2:*
3: pir3:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	œ	7	6	ຫ	4	ω	2	_		Result
81	85.5	85.5	87	87	93.5	93.5	95.5	96.5	96.5	98	98.5	98.5	102.5	127	129.5	134	134	147.5	153.5	153.5	161	168	171	171.5	173.5	174	179.5	214		200
11.0	11.6	11.6	11.8	11.8	12.7	12.7	13.0	13.1	13.1	13.3	13.4	13.4	13.9	17.3	17.6	18.2	18.2	20.0	٠		21.9	22.8	•	23.3	23.6	23.6	24.4	29.1		Arand
430	582	430	639	433	644	427	162	621	436	498	619	434	133	111	141	132	111	142	141	112	141	120	146	127	139	141	140	139		lengt h
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T-kininogen, LMW I	membrane protein P	e phase	kininogen, HMW I p	p, L	Ē	kininogen, LMW pre	tin .	¥	kininogen, LMW I p	hypothetical prote	kininogen, HMW II	kininogen, LMW II	cystatin precursor	ı		cystatin precursor	•		SN	1	cystatin S precurs	റ	a				cystatin C precurs	cystatin-related e		

Cystatin C precursor - mouse
Cyspecies: Mus musculus (house mouse)
C;Species: Mus musculus (house mouse)
C;Date: 14-Dec-1990 #sequence_revision 14-Dec-1990 #text_change 16-Jul-1999
C;Accession: A36163
R;Solem, M.; Rawson, C.; Lindburg, K.; Barnes, D.
Biochem. Biophys. Res. Commun. 172, 945-951, 1990
A;Title: Transforming growth factor beta regulates cystatin C in serum-free mouse embryo A;Reference number: A36163; MUID:91054522; PMID:2241983
A;Reference number: A36163; MUID:91054522; PMID:2241983
A;Residues: preliminary
A;Molecule type: mRNA
A;Residues: 1-140 <SOL>
A;Cross-references: EMBL:M59470; NID:g192911; PIDN:AAA63298.1; PID:g192912
C;Superfamily: cystatin; cystatin homology
F;29-140/Domain: cystatin homology <CYS>
F;39-103,117-137/Disulfide bonds: #status predicted

Query Match

24.4%; Score 179.5; DB 2;

Length 140;

443 543	440 410	36	2 2 2 4 7 2 2 4 7	30 31
72 72 71.5	73.5 73 72.5 72:5	73.5 73.5 73.5	77 75.5 75.5	79 77.5
9.8 9.7	9.9 9.9	10.0	10.3	10.7 10.5
143 245 132	519 861 386 525	438 438 438	430 400 582	430 504
N N N	1222	N N N F	000	2 1
T33301 A59258 D88508	A89903 S12499 S14570 KGHUGH	RGRIM G95044 A47702 T52149	D64151 A46297 S42614	KGRTT1 S54744
hypothetical prote tetraspan TSPAN-6 protein H14A12.5 {	conserved hypothet CHL1 protein - yea tubulin beta chain histidine-rich gly	major acute phase conserved hypothet glucan 1,3-beta-gl beta-gluconase [im	hypothetical prote beta-1,6-N-acetylg membrane protein P	T-kininogen I prec cellulase (EC 3.2.

ALIGNMENTS

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A;Map position: 20p11.2-20p11.2
C;Superfamily: cystatin; cystatin homology
F;30-141/Domain: cystatin homology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Molecule type: protein
A; Residues: 25-141 < 182>
R; Isemura, S.; Saitoh, B.; Sanada, K.; Isemura, M.; Ito,
in Cysteine Proteinases and Their Inhibitors, Turk, V., e
A; Title: Cystatin S and the related cysteine proteinase i
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C;Date: 31-Max-1989 #sequence revision 30-Jun-1989 #text_change 16-Jul-1999
C;Accession: B29632; S02490; Ā41422; B27015
R;Saitch, B.; Kim, H.S.; Smithles, O.; Maeda, N.
Gene 61, 329-338, 1987
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A; Residues: 25-134, 'D', 136-141 <IS2>
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A; Accession: B27015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Cross-references: GB:M19673; GB:M19170; NID:gl86403; PIDN:AAA36116.1; PI A;NOte: the authors translated the codon GAC for residue 129 as Asn R;Saitoh, E: Jeemura, S: Sanada, K.; Kille, H.S.; Smithies, O.; Maeda, N. Biol. Chem. Hoppe-Seyler 369, 191-197, 1988
A;Title: Cystatin superfamily. Evidence that family II cystatin genes are A;Reference number: S02489; MUID:89076505; PMID:3202964
                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Cross-references: GDB:119816; OMIM:123856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Gene: GDB: CST2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Title: Characterization and amino acid sequence of a new acidic cysteine proteinase A;Reference number: A41422; MUID:88139220; PMID:3436950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R;Isemura, S.; Saitoh, E.; Sanada,
J. Biochem. 102, 693-704, 1987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Molecule type:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cystatin SA precursor - human
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Accession: A41422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Accession: S02490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Title: Human cysteine-proteinase inhibitors: nucleotide sequence analysis of three men
A;Reference number: A91589; MUID:88185836; PMID:3446578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Accession:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1;Residues: 1-141 <SAI>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Status: not compared with conceptual translation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Genetics:
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          119
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                                                            63
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                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              B29632
     FAVPWFEQYKILNKSC 134
                                                                                                                                                               WPLCTLLLLATQAVALAWSPQEEDRIIEGGIYDADLNDERVQRALHFVISEYNKATEDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AYHSRAIQVVRARKQLVAGVNYFFDVEMGRTTCTKSQTNLTDCPFHDQPHLMRKALCSFQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KYHFRIFRVLKVQRQVTDHLEYHLNVEMQWTTCQKPET--TNC-VPQERELHKQVNCFFS 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MASPLRSLLFLLAVLGVAWAATPKQGPRMLGAPEEADANEEGVRRALDFAVSEYNKGSND
                                                         YYRRLLRVLRAREQIVGGVNYFFDIEVGRTICTKSQPNLDTCAFHEQPELQKKQLCSFQI
                                                                                                           YHFRIFRVLKVQRQVTDHLEYHLNVEMQWTTCQK--PETTNCVPQER-ELHKQVNCFFSV 118
                                                                                                                                                                                                              WQALQLLLAILLTIMALPYQARKKTFL---SVHEVMAVENYAKDSLQWITDQYNKESDDK 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IYSVPWKGTHSLTKFSCKN 139
                                                                                                                                                                                                                                                                                                                                                                             cystatin homology <CYS>
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                                                                                                                                                                                                                                                                                             23.6%; Score 174; DB 2; Length 141; 25.7%; Pred. No. 1.2e-09;
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tive 30; Mismatches 64
                                                                                                                                                                                                                                                                          Mismatches:
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                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ed., pp.497-505, Walter de Gruyt inhibitors in human saliva.
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                                                         A; Introns: 76/3; 114/3
                                                                                     A;Gene:
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;Superfamily: cystatin; cystatin homology;Reywords: cysteine proteinase inhibitor;
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A;Molecule type: DNA
A;Residues: 1-139 <CO2>
A;Crosm-references: GB:M95725
A;Note: authors failed to translate the codon for residue 115-Tyr
C;Comment: This protein binds tightly to and inhibits a variety of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Molecule type: protein
A; Residues: 24-139 <SCH>
R; Turk, V.; Brzin, J.; Longer, M.; Ritonja, A.; Eropkin, M.; Borchart, U.; Machleidt, M. Hoppe-Seyler's Z. Physiol. Chem. 364, 1487-1496, 1983
A; Title: Protein inhibitors of cysteine proteinases. III. Amino-acid sequence of cystatir A; Reference number: S01461; MUID:84110059; PMID:6662498
A; Accession: S01461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Molecule type: protein
A;Residues: 24-139 <TUR>
R;Anastasi, A.; Brown, M.A.; Kembhavi, A.A.; Nicklin, M.J.H.;
Biochem, J. 211, 129-138, 1983
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Contents: annotation; disulfide bonds R;Auerswald, E.A.; Naegler, D.K.; Schulze, A.J.; Engh, R.A.; Genenger, G.; Machleidt, W., Eur. J. Blochem. 224, 407-415, 1994 A;Title: Production, inhibitory activity, folding and conformational analysis of an N-ter A;Reference number: S48159; MUID:95010016; PMID:7925354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Reference number: A37514; MUID:83256421; PMID:6409085
A;Contents: annotation; characterization of protein
A;Contents: annotation; characterization of protein
R;Grubb, A; Lofberg, H.; Barrett, A.J.
FEBS Lett. 170, 370-374, 1984
A;Title: The disulphide bridges of human cystatin C (gamma-trace) and chicken cystatin.
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C;Date: 03-Aug-1984 #sequence revision 12-Apr-1996 #text change 29-Oct-1999
C;Accession: A34456; A01274; S01461; S48159; S04008; JN0789
R;Colella, R.; Sakaguchi, Y.; Nagase, H.; Bird, J.W.C.
J. Biol. Chem. 264, 17164-17169, 1989
A;Title: Chicken egg white cystatin. Molecular cloning, nucleotide sequence, A;Reference number: A34456; MUID:90008873; PMID:2793849
A;Accession: A34456
                                                                                                                                                                                                                                            R;Colella, R.; Bird, J.W.C.
Gene 130, 175-181, 193
A;Tille: Isolation and characterization of the chicken cystatin-encoding gene: Mapping
A;Reference number: JN0789; MUID:93366172; PMID:8359684
                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Reference number: S04008; MUID:89252033; PMID:2721673
A;Accession: S04008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEBS Lett. 248, 162-168, 1989
A, Title: The cysteine proteinase inhibitor chicken cystatin
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A; Residues: 97-114 < LAB>
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A; Residues: 24-139 < AUE >
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A; Residues: 1-139 < COL>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Laber, B.; Krieglstein, K.;
RBS Lett. 248, 162-168, 1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alternate names:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            inhibitor of cysteine proteinases. Improved purification frowUID:83256421; PMID:6409085
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A.; Kos, J.; Turk,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                V.; Huber,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18
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                                   of cysteine proteinases
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CRIT

egg white; phosphoprotein

A;Molecule type: protein
A;Residues: 8, 'XX',11-20 <ES2>
C;Superfamily: cystatin; cystatin homology
C;Keywords: cysteine proteinase inhibitor
F;16-127/Domain: cystatin homology <CYS>
F;80-90,104-124/Disulfide bonds: #status predicted A; Molecule type: protein
A; Residues: 8-49 < ESN>
R; Esnard, F.; Guillou, F.; Gauthier, F.
R; Esnard, S.; 1992
FEBS Lett. 300, 131-135, 1992
A; Title: Production of the cysteine proteinase inhibitor
A; Reference number: S21109; MUID:92225121; PMID:1563513
A; Accession: S21109 cystatin C precursor - rat (fragment)
C;Species: Rattus norvegicus (Norway rat)
C;Date: 01-Dec-1993 #sequence_revision 03-Aug-1995 #text_change 16-Jul-1999
C;Accession: \$07085; \$01337; \$21109
R;Cole, T.; Dickson, P.W.; Esnard, F.; Averill, S.; Risbridger, G.P.; Gauthier, Bur. J. Biochem. 186, 35-42, 1989 A;Cross-references: EMBL:X16957; NID:g56041; PIDN:CAA34831.1; PID:g736290 R;Esnard, A.; Esnard, F.; Faucher, D.; Gauthier, F. FEBS Lett. 236, 475-478, 1988 A;Reference number: S07085; MUID:90092122; PMID:2689174 A;Accession: S07085 A;Status: preliminary F;1-23/Domain: signal sequence #status predicted <SIG>F;24-139/Product: cystatin, long form #status experimental <CYLF>F;24-139/Product: cystatin homology <CYS>
F;30-139/Product: cystatin, short form #status experimental <CYSF>F;32-139/Product: cystatin, short form #status experimental <CYSF>F;6-80/Region: inhibitory #status predicted F;76-80/Region: inhibitory #status experimental F;94-104,118-138/Disulfide bonds: #status experimental F;94-104,118-138/Disulfide bonds: #status experimental 문 ঠ ঠ A;Title: Two rat homologues of human cystatin C. A;Reference number: S01337; MUID:88313020; PMID:3044831 S 밁 밁 A; Molecule type: mRNA A; Residues: 1-127 < COL> A; Title: The cDNA structure and expression analysis of the genes for the cysteine prote: 뭉 8 밁 ð A;Accession: S01337 Query Match Best Local : Query Match Local 129 NQIKLLESKC 138 69 82 22 35 10 LILAILITIMALPYQARKKTFISVHEVMAVEN--YAKDSIQWITDQYNKESDDKYHFRIF 9 43; Similarity Similarity KPET--TNC-VPQERELHKQVNCFFSVFAVPWFEQYKILNKSCSS 136 EADASEEGVORALDFAVSEYNKGSNDAYHSRAIQVVRARKOLVAGINYYLDVEMGRTTCT 81 EVMAVENYAKDSLQWITDQYNKESDDKYHFRIFRVLKVQRQVTDHLEYHLNVEMQWTTCQ 94 EQYKILNKSC 134 RVISAKROLVSGIKYILOVBIGRTTCPKSSGDLOSCEFHDEPEMAKYTTCTFVVYSIPWL RVLKVQRQVTDHLEYHLNVEMQWTTCQKP--ETTNC-VPQERELHKQVNCFFSVFAVPWF VILAAALMLVGAVLGSEDRSRLLGAPVPVDENDEGLQRALQFAMAEYNRASNDKYSSRVV 68 Conservative Conservative 23.3%; 23.6%; Score 173.5; DB 1; Length 139; 33.1%; Pred. No. 1.3e-09; 24; Mismatches Score 171.5; DB 2; Pred. No. 1.8e-09; Mismatches #status experimental <CYSF> (partial) #status experimental 43; 57; Indels Indels Length cystatin ų. 5 a À Gaps Gaps rat Sertoli cell 128 124 2

RESULT 6

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F.; Sch
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A;Residues: 82-119 <GH2>
A;Cross-references: EMBL:M27769
A;Cross-references: EMBL:M27769
A;Note: the authors translated the codon ACC for residue R;Grubb, A.; Lofberg, H.
Proc. Natl. Acad. Sci. U.S.A. 79, 3024-3027, 1982
A;Title: Human gamma-trace, a basic microprotein: amino a A;Reference number: A01270, MUID:82222268; PMID:6283552
A;Accession: A01270
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e)
                                                                                                                                                                                        A;Molecule type: protein
A;Residues: 37-93,'Q',95-146 <GHI>A;Residues: 37-93,'Q',95-146 <GHI>A;Residues: 37-93,'Q',95-146 <GHI>A;Residues: 37-93,'Q',95-146 <GHI
R;Turk, V.; Brzin, J.; Longer, M.; Ritonja, A.; Bropkin, M.; Borchart, U.; Machleidt, W. Hoppe-Seyler's Z. Physiol. Chem. 364, 1487-1496, 1983
A;Title: Protein inhibitors of cysteine proteinases. III. Amino-acid sequence of cystati: A;Reference number: S01461; MUID:84110059; PMID:6662498
A;Accession: S12288
                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Molecule type: protein
A;Residues: 27-131,'S',133-146 <GRU>
A;Residues: 27-131,'S',133-146 <GRU>
R;Ghiso, J.; Jensson, O.; Frangione, B.
Proc. Natll. Acad. Sci. U.S.A. 83, 2974-2978, 1986
Proc. Natll. Acad. Sci. U.S.A. 83, 2974-2978, 1986
A;Title: Amyloid fibrils in hereditary cerebral hemorrhage with amyloidosis of Iceland
A;Reference number: A25434; MUID:86206076; PMID:3517880
A;Accession: A25434
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A;Refidues: 1-24,'T',26-146 <SAI>
A;Refidues: 1-24,'Tille: 1Belation of a sequence encoding human cystatin C. Conservation of exon-intron & A;Reference number: S02751; MUID:89076507; PMID:3264504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R;Saitoh, E.; Sabatini, L.M.; Eddy, R.L.; Shows, T.B.; A: Biochem. Biophys. Res. Commun. 162, 1324-1331, 1989
A;Title: The human cystatin C gene (CST3) is a member of A;Reference number: A33400; MUID:89350949; PMID:2764935
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A;Residues: 1-146 <LEV>
A;Cross-references: GB:X61681; NID:g30367; PIDN:CAA43856.2; PID:g4490944
A;Cross-references: GB:X61681; NID:g30367; PIDN:CAA43856.2; PID:g4490944
A;Note: the cystatin C gene isolated from the brain of an Icelandic patient
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R;Levy, E.; Lopez-Otin, C.; Ghiso, J.; Geltner, D.; Frangione, B.
J. Exp. Med. 169, 1771-1778, 1989
A;Title: Stroke in Icelandic patients with hereditary amyloid angiopathy is related A;Reference number: JL0095; MUID:89235594; PMID:2541223
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C;Species: Homo sapiens (man)
C;Date: 06-Jul-1982 #sequence revision 31-Mar-1991 #text change 08-Dec-2000
C;Accession: S10216; S00004; JL0095; A33400; S02751; A01270; A25434; S12288; C;Accession: S10216; S00004; JL0095; A33400; S02751; A01270; A25434; S12288; A$;Abrahamson, M.; Olafsson, I.; Palsdottir, A.; Ulvsbaeck, M.; Lundwall, A.;
                                                                A;Molecule type: protein
A;Residues: 27-73 <TUR>
R;Brzin, J.; Popovic, T.; Turk, V.
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A; Residues: 1-146 < AB2 >
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A;Reference number: S10216; MUID:90303202; PMID:2363674
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                                        Biophys. Res. Commun.
Human cystatin, a new protein
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cysteine proteinases.
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Jensson, O.,
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A;Molecule type: protein
A;Molecule type: protein
A;Molecule type: protein
A;Molecule type: BRZ>
A;Residues: 27-76 <BRZ>
A;Residues: 27-76 <BRZ>
R;Olafiseon, I.; Gudmundsson, G.; Abrahamson, M.; Jensson, O.; Grubb, A.
R;Olafiseon, I.; Gudmundsson, 85-93, 1990
Scand. J. Clin. Lab. Invest. 50, 85-93, 1990
Scand. J. Clin. Lab. Invest. 50, 85-93, 1990
A;Title: The amino terminal portion of cerebrospinal fluid cystatin C in hereditary cyst
                                               RESULT 7
S10587
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A; Residues: 27-49; XX', 52-64 < OLA>
A; Residues: 27-49; XX', 52-64 < OLA>
A; Note: this protein, purified from cerebrospinal fluid of patients with the autosomal A; Note: this protein, purified from cerebrospinal fluid of patients with the autosomal edefective gene is not present in CSF but is found instead in amyloid deposits R; Popovic, T.; Brzin, J.; Ritonja, A.; Turk, V.
Biol. Chem. Hoppe-Seyler 371, 575-580, 1990
Biol. Chem. Hoppe-Seyler 371, 575-580, 1990
A; Title: Different forms of home of hom
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F;81-85/Region: inhibitory #status predicted
F;29/Modified site: hydroxyproline (Pro) (partial) #status experimental
F;99-109,123-143/Disulfide bonds: #status experimental
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A;Map position: 20p11.2-20p11.2
A;Introns: 81/3; 119/3
A;Introns: 81/3; 119/3
C;Superfamily: cystatin; cystatin homology
C;Keywords: amyloid; cysteine proteinase inhibitor; extracellular protein; hydroxyprolin C;Keywords: amyloid; cysteine proteinase inhibitor; extracellular protein; hydroxyprolin C;Keywords: amyloid; cysteine proteinase inhibitor; extracellular protein; hydroxyprolin C;Keywords: amyloid; cysteine #status predicted <SIG>
F;1-26/Domain: signal sequence 
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A;Title: The disulphide bridges of human cystatin C (
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A;Title: Local pH-dependent conformational changes leading
A;Reference number: 855305; MUID:94379969; PMID:8092991
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A;Accession: S10607
cystatin C
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A;Contents: annotation; disulfide bonds
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                                                                                                                                                                                                                                                 AFCSFQIYAVPW-QGTMTLSKSTCQD 145
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A;Molecule type: protein
A;Residues: 29-134, 'D', 136-141 <ISB>
A;Residues: 29-134, 'D', 136-141 <ISB>
R;Isemura, S; Saitch, B; Ito, S:; Isemura, M.; Sanada, K.

R;Isemura, S:; Saitch, 1984
J. Biochem. 96, 1311-1314, 1984
A;Tit.le: Cystatin S: a cysteine proteinase inhibitor of human saliva.
A;Reference number: A91981; MUID:85104877; PMID:6394600
A;Reference number: A91981; MUID:85104877; PMID:6394600
A;Contents: annotation; inhibitor specificity
R;Hawke, D.H.; Yuan, P.M.; Wilson, K.J.; Hunkapiller, M.W.
Biochem. Biophys. Res. Commun. 145, 1248-1253, 1987
A;Title: Identification of a long form of cystatin from human saliva.
A;Reference number: A29603; MUID:87270697; PMID:3496880
A;Accession: A29603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C;Species: Homo sapiens (man)
C;Date: 25-Feb-1985 #sequence revision 08-Feb-1996 #text change
C;Date: 25-Feb-1985 #sequence revision 08-Feb-1996 #text change
C;Accession: S17667; S16500; Ā01272; A29603; S19280; A56608
R;Bobek, L.A.; Aquirre, A.; Levine, M.J.
Blochem, J. 278, 627-635, 1991
A;Title: Human salivary cystatin S. Cloning, sequence analysis,
A;Reference number: S17667; MUID:91378918; PMID:1898352
A;Accession: S17667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Status: prellminary
A;Molecule type: protein
A;Residues: 21-134, 'D', 136-141 <IHU>
A;Residues: 21-134, 'D', 136-141 <IHU>
A;Residues: 21-134, 'D', 136-141 <IHU>
R;Isemura, S.; Saitoh, E.; Sanada, K.
J. Biochem. 96, 489-498, 1984
A;Title: Isolation and amino acid sequence of SP-1, an acidic protein of human whole sall A;Reference number: A91985; MUID:85054716; PMID:6501254
A;Accession: A01272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;ACCEBBACH.
A;ACCEBBACH.
A;MOLECULE type: mRNA
A;Residues: 1-141 <BOB>
A;Cross-references: KMBL:X54667; NID:g30365; PIDN:CAA38478.1; PID:g30366
A;Cross-references: KMBL:X54667; NID:g30365; PIDN:CAA38478.1; PID:g30366
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A;Title: Rat cystatin C: the complete amino acid sequence reveals a site for N-glycosylat A;Reference number: S10587; MUID:90380276; PMID:2400577
A;Accession: S10587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       R;Lamkin, M.S.; Jensen, J.L.; Setayesh, M.R.; Troxler, R. Rrich. Biochem. Biophys. 288, 664-670, 1991
A;Tille: Salivary cystatin SA-III, a potential precursor A;Reference number: S16500; MUID:91378515; PMID:1898055
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C;Species: Rattus sp. (rat)
C;Date: 21-Nov-1993 #sequence_revision
C;Accession: S10587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cystatin S precursor - human N;Alternate names: cystatin SA-III; salivary acidic protein-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Residues: 1-120 <ESN>
A;Note: 43-Asn was also found
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  58 AGINYYLDVEMGRTTCTKSQTNLTNCPFHDQPHLMRKALCSFQIYSVPWKGTHTLTKSSC 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LMALPYQARKKTFLSVHEVMAVENYAKDSLQWITDQYNKESDDKYHFRIFRVLKVQRQVT 77
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Pred. No. 3.7e-09;
7; Mismatches 45
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     03-Nov-1995 #text_change 16-Jul-1999
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                                                                                                human saliva by rapid microbore
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A;Molecule type: protein
A;Residues: 1-112 <HIR>
C;Superfamily: cystatin; cystatin homology
C;Superfamily: cystatin; cysteine proteinase inhibitor
C;Keywords: colostrum; cysteine proteinase inhibitor
C;2-112/Domain: cystatin homology <CYS>
C;48-52/Region: inhibitory #status predicted
F;66-76,90-110/Disulfide bonds: #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Map position: 20p11.2-20p11.2
(;Superfamily: cystatin; cystatin homology
C;Keywords: cystatin; cystatin homology
C;Keywords: cystatin sequence #status predicted <SIG>
F;1-20/Domain: signal sequence #status predicted <MAT>
F;21-141/Product: cystatin S #status predicted <MAT>
F;30-141/Domain: cystatin homology <CYS
F;36-80/Region: inhibitory #status predicted
F;94-104,118-138/Disulfide bonds: #status predicted
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A;Residues: 21-51 <HAW>
A;Residues: 21-51 <HAW>
R;Ramasubbu, N.; Reddy, M.S.; Bergey, E.J.; Haraszthy, G.G.; Soni, S.D.; Levine, M.J.
Biochem. J. 280, 341-352, 1991
A;Title: Large-scale purification and characterization of the major phosphoproteins and A;Reference number: S19279; MUID:92082469; PMID:1747107
A;Reference number: S19280
                                                                                                                                                                                                                                                                                                                          A;Title: Complete amino acid sequence of bovine colostrum low-M-r A;Reference number: A01271; MUID:85231205; PMID:3891407 A;Accession: A01271
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R;Residues: 21-55 <RAM>
R;Chardson, M.; Richardson, C.F.; Bergey, B.J.; Levine, M.J.; Nancollas, G.H.
Arch. Oral Biol. 36, 631-636, 1991
A;Title: The effects of human salivary cystatins and statherin on hydroxyapatite crystal
A;Reference number: A56608; MUID:92074898; PMID:1741693
A;Accession: A56608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          N;Alternate names: thiol proteinase inhibitor C;Species: Bos primigenius taurus (cattle) C;Date: 28-Feb-1986 #sequence_revision 28-Feb
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A;Note: authors desigate form without phosphate as cystatin S and form containing one phocomment: This protein strongly inhibits papain and ficin, partially inhibits stem brown
                                                                                                                                                                                                                                                                                                                                                                                                                                               C;Accession: A01271
R;Hirado, M.; Tsunasawa, S.; Sakiyama, F.; Niinobe, M.; Fujii,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
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                                                                                                                                                                                                                                                                                                                                                                                                                            FEBS Lett. 186, 41-45, 1985
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Matches
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                               Match 20.9%;
Local Similarity 30.6%;
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   30;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEYYRRPLQVLRAREQTFGGVNYFFDVEVGRTICTKSQPNLDTCAFHEQPELQKKQLCSF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DKYHFRIFRVLKVQRQVTDHLEYHLNVEMQWTTCQK--PETTNCVPQER-ELHKQVNCFF 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MARPICTILLIMATLAGALASSSKEENRIIPGGIYDADLNDEWVQRALHFAISEYNKATE 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21.9%; Score 161; DB 1; ilarity 27.5%; Pred. No. 2.1e-08; Conservative 31; Mismatches 65
   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GDB: 136381
   23; Mismatches
                            Score 153.5; DB 1
Pred. No. 8.5e-08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28-Feb-1986 #text_change 06-Dec-1996
                                                              DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   65;
   42;
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                                                           Length 112;
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   Gaps
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C;Species: Homo sapiens (man)
C;Date: 28-May-1986 #sequence revision 08-Feb-1996 #text_change 08-Dec-2000
C;Date: 28-Bill; 502489; A29632; A01273; S19279
R;Al-Hashimi, I.; Dickinson, D.P.; Levine, M.J.
J. Biol. Chem. 263, 9381-9387, 1988
A;Title: Purification, molecular cloning, and sequencing of salivary cystatian, Reference number: A28110; MUID:88243825; PMID:2837486
A;Accession: A28110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Molecule type: protein
A;Residues: 29-141 <ISE>
A;Residues: 29-141 <ISE
A;A;Accession: S19279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Cross-references: GB:J03870; NID:g337751; PIDN:AAA60299.1; PID:g337752 R;Sairch, E.; Isemura, S.; Sanada, K.; Kim, H.S.; Smithies, O.; Maeda, N. Biol. Chem. Hoppe-Seyler 369, 191-197, 1986 Pic. Chem. Hoppe-Seyler 369, 191-197, 191-197, 1986 Pic. Chem. Hoppe-Seyler 369, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-197, 191-
                                                                                                                                                                             C;Reywords: cysteine proteinase inhibitor; extracellular protein; F;1-20/Domain: signal sequence #status predicted <SIG> F;21-141/Product: cystatin SA-I #status experimental <MAT1> F;29-141/Product: cystatin SN #status experimental <MAT2> F;30-141/Domain: cystatin homology <CYS> F;76-80/Region: inhibitory #status predicted F;94-104,118-138/Disulfide bonds: #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R;Saitoh, B.; Kim, H.S.; Smithies, O.; Maeda, N.
Gene 61, 329-338, 1987
A;Title: Human cysteine-proteinase inhibitors: nucleotide sequence analysis of three membareance number: A91589; MUID:88185836; PMID:3446578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cystatin SN precursor [validated] N;Alternate names: cystatin SA-I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
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C, Superfamily: cystatin; cystatin homology
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Molecule type: protein
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A; Residues: 1-86, 'I', 88-141 <SAI>
R; Isemura, S.; Saitoh, B.; Sanada,
FEBS Lett. 198, 145-149, 1986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
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A;Reference number: A01273; MUID:86164938; PMID:3514272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Residues: 21-141 <SA2>
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A; Residues: 1-141 < ALH>
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                                                                                              Query Match
    Matches
                                                      Local Similarity
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    38;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ENYAKDSLQWITDQYNKESDDKYHFRIFRVLKVQRQVTDHLBYHLNVEMQWTTCQKPETT 99
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Conservative
                                                 20.9%;
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         30; Mismatches
                                                 Score 153.5; DB 1
Pred. No. 1.1e-07;
                                                                                              DB 1;
         Indels
                                                                                              Length 141;
         7;
         Gaps
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pro

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cystatin - chum salmon
(;Alternate names: cysteine proteinase inhibitor
(;Species: Oncorhynchus keta (chum salmon)
(;Date: 14-Jul-1994 #sequence_revision 14-Jul-1994
(;Accession: JC2040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A,Cross-references: GB:X70377; NID:g398710; PIDN:CAA49838.1; PID:g398711
A;Note: single residue difference between this report and S18218 was investigated R;Freije, J.P.; Abrahamson, M.; Olafsson, I.; Velasco, G.; Grubb, A.; Lopez-Otin, J. Biol. Chem. 266, 20538-20543, 1991
A;Title: Structure and expression of the gene encoding cystatin D, a novel human c A;Reference number: S18212; MUID:92041895; PMID:1939105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R;Freije, J.P.; Balbin, M.; Abrahamson, M.; Velasco, G.; Dalboge, J. Biol. Chem. 268, 15737-15744, 1993
A;Title: Human cystatin D. cDNA cloning, characterization of the EA;Reference number: A47142; MUID:93340179; PMID:8340398
A;Accession: A47142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C;Superfamily: cystatin; cystatin homology C;Superfamily: cysteine proteinase inhibitor; extracellular protein; saliva F;1-20/Domain: signal sequence #status predicted <SIG>F;30-142/Domain: cystatin homology <CYS>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Cross-references: GDB:136380; OMIM:123858
A;Map position: 20p11.21-20p11.21
A;Introns: 77/3; 115/3
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A;Residues: 1-45,'C',47-142 <FR2>
A;Cross-references: EMBL:X59964; NID:g30263; PIDN:CAA42590.1;
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                                                                                                                 JC2040
                                                                                                                                     RESULT 12
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Best Local S
Matches 39
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;Date: 03-May-1994 #sequence_revision 03-May-1994 #text_change 16-Jul-1999;

;Accession: A47142; S18212
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                    FQINEVPWEDKISILNYKC 139
                                                                                                                                                                                                                                               FSVFAVPWFEQYKILNKSC 134
                                                                                                                                                                                                                                                                                           KDEYYSRPLQVMAAYQQIVGGVNYYFNVKFGRTTCTKSQPNLDNCPFNDQPKLKEEEFCS
                                                                                                                                                                                                                                                                                                                                     DDKYHFRIFRVLKVQRQVTDHLEYHLNVEMQWTTCQK--PETTNC-VPQERELHKQVNCF 115
                                                                                                                                                                                                                                                                                                                                                                                 MMWPMHTPLLLITALMVAVAGSASAQSRTLAGGIHATDLNDKSVQRALDFAISEYNKVIN 60
                                                                                                                                                                                                                                                                                                                                                                                                                          MAEPWQALQLLLAILLTLMALPYQARKKTFL-SVHEVMAVENYAKDSLQWITDQYNKE-S 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           YEVPWENRRSLVKSRC 138
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QALQLLLAILLTL-MALPYQARKKTFL---SVHEVMAVENYAKDSLQWITDQYNKESDDK 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              YYRRPLRVLRARQQTVGGVNYFFDVEVGRTICTKSQPNLDTCAFHEQPELQKKQLCSFEI 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QHLSTLLLLLATLAVALAWSPKEEDRIIPGGIYNADLNDEWVQRALHFAISEYNKATKDD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 147.5; DB 2;
Pred. No. 4.2e-07;
Pred. No. 68;
                    #text_change 16-Jul-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
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C.
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cystatin S precursor - rat (Norway rat) C;Species: Rattus norvegicus (Norway rat) C;Date: 17-Jul-1992 #sequence_revision 17-Jul-1992 #text_change 16-Jul-1999 C;Accession: JQ1470; A31891; S05252; S15132 R;Cox, J.L.; Shaw, P.A.
                                                                                                            JQ1470
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                                                                                                                                     RESULT
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Biosci. Biotechnol. Biochem. 58, 164-169, 1994
A;Title: The complete amino acid sequence of pituitary cystatin:
A;Reference number: JC2040; MUID:94162738; PMID:7764512
A;Accession: JC2040
A;Molecule type: protein
A;Residues: 1-11 <KOI>C;Comment: The intracellular role of this protein is the inhibit:
C;Superfamily: cystatin; cystatin homology
C;Esymords: Cystatin proteinase inhibitor
F;2-11/Domain: cystatin homology <CYS>
F;48-52/Region: inhibitory
F;48-109/Disulfide bonds: #status experimental
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cystatin precursor - chum salmon (;Species: Oncorhynchus keta (chum salmon) (;Date: 26-Sep-1996 #sequence_revision 01-C;Accession: JC4918 R;Yamashita, M.; Konagaya, S. J. Biochem. 120, 483-487, 1996 J. Biochem.
                                                                                                                                                                                                                                                                                                                                                   C;Keywords: liver
F;1-21/Domain: signal sequence #status predicted
F;23-132/Domain: cystatin homology <CYS>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  J. Biochem. 120, 483-484, 1755
A;Title: Molecular cloning and gene expression of chum salmon
A;Reference number: JC4918; MUID:97058289; PMID:8902609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Cross-references: DDBJ:D86628
A;Experimental source: liver
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Residues: 1-132 <YAM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Status: preliminary A;Molecule type: mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                     Superfamily: cystatin; cystatin; keywords: liver
                                                                                                                                                                                                                                                                                                                                                                                                                                               Comment: This protein is a homolog of mammalian
                                                                                                                                                                                                                                                                         Matches
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  110
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                                                                                       50
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                                                                                                                                                                                                                                                                      34;
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                                         CFFSVFAVPWFEQYKILNKSCSS 136
                                                                                       KKTNDMFVRQVAKVVNAQKQVVSGMKYIFTVQMGRTPCRKGGVEKICSVHKDPQMAVPYK 109
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CTFEVWSRPWMSDIQMVKNQCES
                                                                                                                                   KESDDKYHFRIFRVLKVQRQVTDHLEYHLNVEMQWTTCQK--PETTNCVPQERELHKQVN 113
                                                                                                                                                                               MIMEWKIVVPLLAVAFTVANAGLIGGPMDANMN------DQGTRDALQFAVVEHN
                                                                                                                                                                                                                        MAEPWQALQLLLAILLT-----LMALPYQARKKTFLSVHEVMAVENYAKDSLQWITDQYN
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                                                                                                                                                                                                                                                                    Score 134; DB 2;
Pred. No. 7.7e-06;
2; Mismatches 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 134; DB 1;
Pred. No. 6.4e-06;
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Wed

175-180, 1992

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cystatin - puff adder
C;Species: Bitis arietans (puff adder)
C;Date: 15-Dec-1988 #sequence_revision 15-Dec-1988 #text_change 30-Sep-1993
C;Accession: A28793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 15
A28793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C;Genetics:
A;Genetics:
A;Gene: Cyss
A;Introns: 76/3; 114/3
A;Introns: 76/3; 114/3
C;Superfamily: cystatin; cystatin homology
C;Keywords: cystatin sequence #status predicted <SIG>F;1-28/Domain: signal sequence #status predicted <MAT>F;28-141/Product: cystatin S #status experimental <MAT>F;29-141/Product: cystatin S, form RSC-3 #status predicted <MAT3>F;30-141/Domain: cystatin homology <CYS>F;31-141/Product: cystatin S, form RSC-1 #status predicted <MAT2>F;32-141/Product: cystatin S, form RSC-1 #status predicted <MAT1>F;94-104,118-138/Disulfide bonds: #status experimental
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A;Recession: JQ1470
A;Accession: JQ1470
A;Molecule type: DNA
A;Residues: 1-141 <COX>
A;Residues: 1-141 <COX>
A;COX>
A;Cross-references: GB:M75281; NID:9294537; PIDN:AAA41068.1; PID:9294538
A;Cross-references: GB:M75281; NiD:9294537; PIDN:AAA41068.1; PID:9294538
B;Shaw, P.A.; Cox, J.L.; Barka, T.; Naito, Y.
J. Biol. Chem. 263, J8133-18137, 1988
A;Title: Cloning and sequencing of cDNA encoding a rat salivary cysteine proteinase inhibitoric number: A31891; MUID:89053983; PMID:3263967
A;Accession: A31891; MUID:89053983; PMID:3263967
                                                                                                                                                                                                                                                      R;Ritonja, A.; Evans, H.J.; Machleidt, W.; Barrett, A.J.
Blochem. J. 246, 799-802, 1987
A;Title: Amino acid sequence of a cystatin from venom of the African puff adder (Bitis A;Reference number: A28793; MUID:88076861; PMID:3500714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Molecule type: protein
A;Residues: 29-38,76-80 <BIO>
A;Note: forms RSC-1, RSC-2 and RSC-3 with differing amino-terminals were
C;Genetics:
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A; Molecule type: protein
A; Residues: 28-113, 'QE', 116-141 <BED'
A; Residues: 28-113, 'QE', 116-141 <BED'
A; Note: 87-Glu and 88-His were also found; disulfide bonds determined
A; Nishiura, T.; Ishibashi, K.; Abe, K.
Biochim. Biophys. Acta 1077, 346-354, 1991
Biochim. Biophys. Acta 1077, 346-354, 1991
A; Title: Isolation of three forms of cystatin from submandibular saliva of isoproterenol
A; Reference number: S15132; MUID:91230145; PMID:1903068
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A;Title: Amino acid sequence of an inducible cysteine proteinase inhibitor (cystatin) A;Reference number: S05252; MUID:89334379; PMID:2757396
A;Accession: S05252
                                                                                                                                                  A;Accession: A28793
A;Molecule type: protein
A;Residues: 1-111 <RIT>
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A;Residues: 'ISTDYLYISFEHETLSC',27-141 <SHA>
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Best Local S
Matches 32
   Query Match
Best Local Similarity
                                                                                                               Superfamily:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        101 LTNC-PLNEEADQQEHEFCSFVVHDIPWENYIVLLSSSCHS 140
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                40 ENYAKDSLQWITDQYNKESDDKYHFRIFRVLKVQRQVTDHLEYHLNVEMQWTTCQKP--E 97
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Similarity 31.7%; Pred. No. 2.3e-05;
32; Conservative 20; Mismatches 44; Indels 5
                                                                                                               cystatin;
                                                                                                               cystatin homology
   17.3%;
Score 127; DB 2;
Pred. No. 3e-05;
                                      Length 111;
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                          96 PETTNC-VPQERELHKQVNCFFSVFAVPW 123
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                                                                             44 KDSLQWITDQYNKESDDKYHFRIFRVLKVQRQVTDHLBYHLNVEWQWTTCQK-----
                                                                                                          27; Conservative
QEIQNCNLPPENQ-QEEITCRFEVWSRPW 103
                                                                                                          24;
                                                                                                            Mismatches
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                                                                                                            Indels
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Search completed: January 21, 2004, 12:09:16
Job time: 26.7484 secs

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THIS PACE BY WINK WARD JOHO SIHIT

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Result
No.
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB seq length: 200000000
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                                                                                                                                                                                                                                                         Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
  404
192.5
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1: sp_archea:*
2: sp_bacteria:*
3: sp_fungi:*
4: sp_human:*
  100.0
69.0
26.2
26.2
26.0
18.9
18.9
16.6
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736
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                                                                                                                                                                                                                                                                                                 sp_organelle:*
sp_phage:*
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sp_vertebrate:*
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sp_bacteriap:*
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Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                    sp_invertebrate:*
sp_mammal:*
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                                                                                                                                                                                                 Length
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103
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  QBWXU6
QBWXU5
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QDDAP1
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QDBSR3
QDSVIH8
QBVIH13
QDSVA6
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O8k5a3 rattus norv
O9epy9 mus musculu
O9dap1 mus musculu
O98sr4 acipenser s
O98sr3 acipenser s
O9jm84 mus musculu
O8vih8 rattus norv
O9cx46 mus musculu
O8vi13 mus musculu
O9dan8 mus musculu
O9dan8 mus musculu
O9dan9 mus musculu
O9dan1 mus musculu
O9dan1 mus musculu
O9dan3 mus musculu
                                                                                                                                                                Q8wxu6 homo sapien
Q8wxu5 homo sapien
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45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17
75.5	75.5	75.5	75.5	75.5	76.5	78	78.5	79	79	79	79	79.5	80.5	81.5	82	82.5	83.5	84	84.5	84.5	85.5	90.5	92.5	95.5	98	100.5	101	105
10.3	10.3	10.3	10.3	10.3	10.4	10.6	10.7	10.7	10.7	10.7	10.7	10.8	10.9	11.1	11.1	11.2	11.3	11.4	11.5	11.5	11.6	12.3	12.6		13.3	13.7	13.7	14.3
5415	582	410	400	400	406	996	159	576	432	430	209	2773	133	115	127	157	1824	425	127	125	582	148	161	109	498	144	133	128
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Q8IB74	Q49558	Q9FFW2	Q8WXK7	Q8WXK6	Q8I3M2	Q8NDM7	Q8TD53	QBUODO	Q91XK5	Q63581	Q815X0	Q8IBF4	Q8MVB6	Q95K43	Q9U9A1	Q17108	Q9NBH3	Q12700	P90698	Q25620	Q49557	Q9NH95	016159	Q9TY65	016454	Q8JFU5	Q9D264	Q8VII2
Q8ie74 plasmodium	Q49558 mycoplasma	2 arab	Q8wxk7 homo sapien	Q8wxk6 homo sapien	plasm	homo		0 pyrc	Q91xk5 mus musculu							Q17108 acanthochei		_	P90698 brugia mala	Q25620 onchocerca	Q49557 mycoplasma			Q9ty65 onchocerca	O16454 caenorhabdi	Q8jfuS brachydanio		

ALIGNMENTS

Db 122 VPWPEQYKILNKSCSSD 138	OY 121 VPWFEQYKILNKSCSSD 137	Db 62 KYHFRIFRVLKVQRQVTDHLEYHLNVEMQWTTCQKPETTNCVPQERELHKQVNCFFSVFA 121	OY 61 KYHFRIFRVLKVQRQVTDHLEYHLNVEMQWTTCQKPETTNCVPQBRBLHKQVNCFFSVFA 120	Db 2 MAEFWQALQLILIAILITIMALFYQARKKTFLSVHEVMAVENYAKDSLQWITDQYNKESDD 61	Qy 1 MARPWQALQLLLAILLTLMALPYQARKKTFLSVHEVMAVENYAKDSLQWITDQYNKESDD 60	Query Match 100.0%; Score 736; DB 4; Length 138; Best Local Similarity 100.0%; Pred. No. 1.5e-69; Matches 137; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	DK SMAKT; SMOUGE; CI; I. SQ SEQUENCE 138 AA; 16506 MW; E49440ACA3585C64 CRC64;	InterPro; IPR00010; Cystat	THE CHARACT ACTIVE CASE THE CONTROL OF THE CONTROL	Hamil K.G., Liu Q., Zhang YL., French F.S., Hall S.H.;	RP SEQUENCE FROM N.A.	_	Mammalia; Eutheria; Primates;	DE SC13.	01-JUN-2002 (TrEMBLrel. 21, Last	01-MAR-2002 (TrEMBLrel. 20,	ID QBWXU6 PRELIMINARY; PRT; 138 AA.	RESULT 1

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RESULT

QBK5A3

ID K5A3

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Best Local S
Matches 102
                                                                      Matches
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Best Local Similarity
                                                                                                                       STRAIN-Sprague-Dawley;
Hamil K.G., Hall S.H.;
Submitted (APR-2002) to the EMBL/GenBank/DDBJ
EMBL; APS01290; AAM21709.1; -.
InterPro; IPR000010; Cystatin.
Pfam; PP00031; cystatin; 1.
SMART; SM00044; CY; 1.
                                                                                                                                                                                                                                                                                                                                            Q8K5A3;
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01-MAR-2002
01-MAR-2002
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SC13delta.
Homo sapiens (Human).
Homo sapiens (Human).
Homo sapiens (Human).
Homo sapiens (Human).
                                                                                                                                                                                                                                               Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hamil K.G., Liu Q., Zhang Y.-L., French F.S., Hall S.H.; "SC13: A novel epididymal specific member of the cystatin Submitted (JAN-2001) to the EMBL/GenBank/DDBJ databases. EMBL; AR335481; AAL71992.1; -. InterPro; IPR000010; Cystatin. Pfam; PF00031; Cystatin; 1. SEQUENCE 103 AA; 12285 MW; 05DD92C47387B022 CRC64;
                                                                                                                                                                                                                                                                                                        01-OCT-2002
01-MAR-2003
                                                                                                                   SEQUENCE
                                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                   NCBI_TaxID=10116;
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 KYHFRIFRVLKVQRQVTDHLEYHLNVEMQWTTCQKPETTNCVPQERELHKQVNCFFSVFA 120
                                             MAEPWQALQLLLAILLTLMALPYQARKKTFLSVHEVMAVENYAKDSLQWITDQYNKESDD
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                        MARLWKTTWFLLAILVALVAFSYQVKRKTFIRVEEVNALESSVKETLEYVTEEYNKKSED
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                                                                                                                   139 AA;
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                                                                      Conservative
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                                                                                                                   16686 MW;
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74.5%;
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21,
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                                                                    Score 404; DB 11;
Pred. No. 1.1e-34;
36; Mismatches 32;
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Pred. No. 1e-
                                                                                                                                                                                                                                               Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Rattus.
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                                                                                                                                                                                                                                                                                                                                                       PRT;
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AC Q9
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Best Local S
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SEQUENCE
SEQUENCE FROM N.A.
STRAIN=C57BL/6J; TISSUE=Testis;
                                       Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                     Q9DAP1;
01-JUN-2001 (TrEMBLrel.
01-JUN-2001 (TrEMBLrel.
01-MAR-2002 (TrEMBLrel.
                                                           Mus musculus (Mouse).
                                                                                                                             Q9DAP1
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Taupin P.J., Ray J., Fischer W.H., Gage F.H.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-MAR-2001
01-MAR-2002
                             NCBI_TaxID=10090;
                                                                   1700006C19Rik protein.
1700006C19RIK.
                                                                                                                                                                                                                                                                                                                                                                 PROSITE; PS00287; CYSTATIN; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                 autocrine/paracrine cofactor.";
Neuron 28:385-397(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE=21010502; PubMed=11144350;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NCBI_TaxID=10090;
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Mammalia; Eutheria;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-MAR-2001
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SMART; SM00043; CY; 1.
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                                                                                                                                                                                                                                                                                              44;
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                                                                                                                                                                                              VFAVPWFEQYKILNKSCSS
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140 AA;
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                                       Chordata;
Rodentia;
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Rodentia;
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MW; 3A563406DD58D785 CRC64;
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Pred. No. 1.7e
30; Mismatches
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Sciurognathi;
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Sciurognathi;
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thi; Muridae; Murinae; Mus
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RA Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,
RA Arakawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Schriml L.M., Staubhi F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Wordone P., Marchionni L., Mashima J., Mazazarelli J., Mombaerts P.,
RA Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
RA Suzuki H., Toyo-oka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,
RA Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
RA Havashizaki Y.:
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Best Local
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InterPro; IPRO00010; Cystatin.
Pfam; PF00031; Cystatin; 1.
SMART; SM00043; CY; 1.
PROSITE; PS00287; CYSTATIN; 1.
NON_TER 1
                                                                                                                                                                                                                 Bal J., Lao H., Ye X., Li Y., Lou J.;
"Molecular cloning and sequence analysis of cystatin cD!
species of sturgeons.";
Submitted (JAN-2001) to the EMBL/GenBank/DDBJ databases.
EMBL; AP334610; AAK16731.1;
HSSP; P01038; 1A90.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Acipenser sinensis (Chinese sturgeon).

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Chondrostei; Acipenseriformes; Acipenseridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-JUN-2001 (TrEMBLrel. 17, Created)
01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Q98SR4;
01-JUN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MGD; MGI:1916544; 1700006C19Rik.
InterPro; IPRO00010; Cystatin.
Pfam; PF00031; cystatin; 1.
SMART; SM00043; CY; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cystatin (Fragment
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EMBL; AK005665; BAB24175.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TISSUE-Liver;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID=61970;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hayashizaki Y.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      σ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NERVVDILKSQEQITDSLEYYLEVNIARTMCKKVAGDNENCLFQQDPKMKKMVFCIFIVS
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Pred. No. 2.5e-12;
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RESULT 7
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SEQUENCE
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                                                         CST10 OR DD72.
Mus musculus (Mouse).
Musamyota, Metazoa, Chordata,
Mammalia, Eutheria, Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACIPORTY (LABOREUL).
ACIPORNET SCHTENCKII (Amur sturgeon).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Metazoa; Chondrostei; Acipenseriformes; Acipenseridae;
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01-JUN-2001 (TrEMBLrel.
01-MAR-2003 (TrEMBLrel.
                                                                                                                       01-OCT-2000
01-OCT-2002
                                                                                                                                                Q9JM84;
01-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Bai J., Lao H., Ye X., Li Y., Lou J.;
"Molecular cloning and sequence analysis of cystatin cDl
species of sturgeons.";
Submitted (JAN-2001) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q98SR3;
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                         SEQUENCE FROM N.A.
                                                                                                              DD72 protein
                                                                                                                                                                        Q9JM84
                                                                                                                                                                                                                                                                                                                                                                                                          InterPro; IPR000010; Cystatin. Pfam; PF00031; Cystatin; 1. PROSITE; PS00287; CYSTATIN; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL; AF334611; AAK16732.1; HSSP; P01038; 1A90.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=111304;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Acipenser.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cystatin (Fragment)
                                               NCBI_TaxID=10090;
"DD72, a novel mouse
                                                                                                                                                                                                8
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                                                                                                                                                                                                                                                                                                  ENYAKDSLQWITDQYNKESDDKYHFRIFRVLKVQRQVTDHLEYHLNVEMQWTTCQK---P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ENYAKDSLQWITDQYNKESDDKYHFRIFRVLKVQRQVTDHLBYHLNVEMQWTTCQK---P 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ETTNC---- VPOERELHKOVNCFFSVFAVPWFEQYKILNKSCS 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KIELCAPHDVP---BLAKTSTCTFEVVSRLWIPETKLVKNTCT 112
                                                                                                                                                                                                                                                             ETTNC---- VPQERELHKQVNCFFSVFAVPWFEQYKILNKSCS 135
                                                                                                                                                                                                                                                                                    EEGVQDALKFAVAEFNKASNDMYIHRVSKVVKVQKQVVAGIKYIVTVQMGRTSCRKGGAE 72
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                                                                                                                                                                                                                                                                                                                                                                                     112 AA;
                                                                                                                        ) (TrEMBLrel. 15,
) (TrEMBLrel. 15,
2 (TrEMBLrel. 22,
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                                                                                                                                                                         PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                      12231 MW; 48ECEBFED8A08C00 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12231 MW;
                                                                                                                                                                                                                                                                                                                                    18.9%; Score 139; DB 13; 32.0%; Pred. No. 5.6e-07; tive 24; Mismatches 36
 gene implicated in the early stage of ectopic
               ۲.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sequence analysis of cystatin cDNA
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Last sequence update)
Last annotation updat
                                                            Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
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Best Local
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InterPro; IPRO01713; StefinA.
Pfam; PP00031; Cystatin; 1.
PRINTS; PR00295; STEFINA.
SMART; SM00043; CY; 1.
PROSITE; PS00287; CYSTATIN; 1.
SEQUENCE 148 AA; 16451 MW; 6
Q9CX46
Q9CX46;
01-JUN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                TE-1, new members of the cystatin family.";
Submitted (CCT-2001) to the EMBL/GenBank/DDBJ databases.
EMBL; AF442205; AR135350.1;
InterPro; IPR000010; Cystatin.
Pfam; PF00031; Cystatin; 1.
SMART; SM00043; CY; 1.
SMART; SM00043; CY; 1.
SMART; SM00043; CY; 1.
SMART; SM00043; CY; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q8VIH8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN-Sprague-Dawley; TISSUE-Testis;
Li Y., Friel P.J., Griswold M.D.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-MAR-2002
01-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MGD; MGI:1930004; Cst10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cystatin SC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL; AB036743; BAA95411.1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Molecular cloning and characterization of cystatin SC 
TE-1, new members of the cystatin family.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ossification.",
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                                                                                                                                                                                                                                                                                                                                                                              Similarity
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                                                                                                                                                                                                         MOWITCOKPETT -- NCVPQERELHKQVNCFFSVFAVPWFEQYKILNKSC 134
                                                                                                                                                                                                                                                                                                        KTFLSVHEVMAVENYAKDSLQWITDQYNKESDDKYHFRIFRVLKVQRQVTDHLEYHLNVE
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                                                                                                                                                                MGRTICKKHDENIHNCPLLQGSGEKKVHCVFQVDARPWFSHFTVLTSTC
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  (TrEMBLrel. 17,
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                                                PRELIMINARY;
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23.2%;
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                                                                                                                                                                                                                                                                                                                                                   Score 122; DB; Pred. No. 4e-0: 28; Mismatches
                                                                                                                                                                                                                                                                                                                                                           28;
  Created)
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Last annotation update)
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Pred. No. 3.7e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Rattus.
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                                                PRT;
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DRIFT RRAPPORT
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RA Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,
RA Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Rizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Rizawa K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,
RA Fleischmann W., Gaasterland T., Misaido I., Pesole G., Quackenbush J.,
RA Fleischmann W., Gaasterland T., Misaido I., Pesole G., Quackenbush J.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,
RA Guetincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Guetincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Guetincich S., Hill D., Hofmann M., Rodriguez I., Sakamoto N.,
RA Mordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
RA Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
RA Mynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
Hayasahtari Y., Storch K., Fordaya M., Lee N., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
Hayasahtari Y., Storch K., Fordaya M., Lee N., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
Hayasahtari Y., Storch K., Fordaya M., Lee N., Kawaji H., Kohtsuki S.,
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Best Local (
                                                                                                                                                                                                                                                       01-MAR-2002
01-MAR-2002
01-JUN-2002
                                                                                                                                                                                                                                                                                                                  Q8VII3;
STRAIN=C57; TISSUE=Testis;
Li Y., Friel P.J., Griswold M.D.;
Li Y., Friel P.J., Griswold M.D.;
"Molecular cloning and characterization of cystatin SC
TE-1, new members of the cystatin family.";
Submitted (CCT-2001) to the EMBL/GenBank/DDBJ databases
EMBL; AF440735; AAL30841.1; -.
                                                                                                                                                                          Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                       Cystatin SC.
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SEQUENCE FROM N.A.
TISSUE=Embryonic
---1217851;
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Mammalia; Eutheria;
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01-DEC-2001 (TrEMBLrel.
8030411F24Rik protein.
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InterPro; IPR000010; Cystatin.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Functional annotation of a full-length mouse cDNA collection.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hayashizaki Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE=21085660; PubMed=11217851;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pfam; PF00031; cystatin; 1.
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                                                                                                                                                                                                                                                                                                                                          PRELIMINARY;
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Rodentia;
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19,
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Pred. No. 5.1e
28; Mismatches
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Last annotation update)
                      EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                         Last sequence update)
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                                                                                                                                                                            Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                          PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DD2F930B64B4E584 CRC64;
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RESULT 12

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ACAGA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WEDLINE=21085660; PubMed=11217851;

XX Kawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,

XX Kawai J., Shinagawa A., Shibata K., Konno H., Adachi J., Pukuda S.,

XX Arakawa T., Hara A., Shibata K., Konno H., Kondo S., Yamanaka I.,

XX Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,

XX Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,

XX Asaota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,

XX Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,

XX Pleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,

XX Kuchi P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,

XX Kuchi P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,

XX Schriml L.M., Staubli P., Suzuki R., Tomita M., Wagner L.,

XX Schriml L.M., Staubli P., Suzuki R., Tomita M., Wagner L.,

XX Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,

XX Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,

XX Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,

XX Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,

XX Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,

XX Sakai K., Okido T., Furuno M., Aono H., Kamiya M., Lee N.H.,

XX Sakai H., Sato K., Schoembach C., Seya T., Shibata Y., Storch K.-F.,

XX Sasaki H., Toyo-oka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,

XX Sarahay Porise A. Yosehida K. Hasocawa Y. Kawaii H. Kohteniki S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
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Matches 30
   Matches
                                     Best
                                                          Query Match
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Q9DAN8;
01-JUN-2001
01-JUN-2001
01-MAR-2002
                                                                                                                                                                                                                                                                                                                        Li Y., Friel P.J., Griswold M.D.;
"Molecular cloning and characterization of cystatin SC:
TE-1, new members of the cystatin family.";
Submitted (OCT-2001) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           InterPro; IPR000010; Cystatin. Pfam; PP00031; cystatin; 1. SMART; SM00043; CY; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Rodentia;
                                                                                                                                                    Pfam; PF00031; cystatin; 1. 
SMART; SM00043; CY; 1.
                                                                                                                                                                                                                                                                    EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                     STRAIN=C57;
Li Y., Frie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRAIN=C57BL/6J; TISSUE=Testis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
                                                                                                                        SEQUENCE
                                                                                                                                                                                                                                        MGD; MGI:1916612; 1700006F03Rik.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nature 409:685-690(2001).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Wynshaw-Boris A., Yoshida
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1700006F03RIK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1700006F03Rik protein (Cystatin TB-1).
                                                                                                                                                                                                            InterPro; IPR000010; Cystatin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Functional annotation of a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hayashizaki Y.;
                              Local
                                                                                                                                                                                                                                                                    AK005670; BAB24179.1; -. AF440737; AAL30843.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        79
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MGRTICKKHDENIHNCPLLQGSREKKVHCVFQVDARPWFSHFTILTSTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KEPLDVTKDL---DYFVASVEFAVAQFNDNNPEENTYKLLEVGRAQKK-TWTMIFLMDLE
                                                                                                                        128 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   130 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (TrEMBLrel. 17, Created)
(TrEMBLrel. 17, Last sequence update)
(TrEMBLrel. 20, Last annotation update)
   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                 TISSUE-Testis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRELIMINARY;
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                              15.8%;
25.2%;
                                                                                                                        15036 MW; 40AFD00103E55ED6 CRC64;
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; Score 116.5; DB 11; Length ; Pred. No. 0.00015; 30; Mismatches 54; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    full-length mouse cDNA collection.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 121; DB 11;
Pred. No. 5.1e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hasegawa Y., Kawaji H., Kohtsuki S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      128
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                                                       Length
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Storch K.-F.,
   17;
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Best Local :
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01-MAR-2002
01-JUN-2002
Strausberg R.; Submitted (APR-2002) to the EMBL/GenBank/DDBJ databases EMBL; BC027680; AAH27680.1; -.
                                                                                                                                          OBK397;
01-OCT-2002 (TrEMBLrel. 22, Created)
01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chor
Mammalia; Eutheria; Rode
                                                                                          Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                  RIKEN cDNA 1110017E11 gene Mus musculus (Mouse).
                                                                                                                                                                                             Q8K397
                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      InterPro; IPR000010; Cystatin. Pfam; PF00031; Cystatin; 1. SMART; SM00043; CY; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pfam;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Submitted (JUL-2001) to the EMBL/GenBank/DDBJ databases EMBL, AY046415; AAL02328.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Characterization of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q8VHC1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  08VHC1
                                         TISSUE=Mammary gland,
                                                       SEQUENCE FROM N.A.
                                                                             NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                         119
                                                                                                                                                                                                                                                                                 102 VPQERELHKQVNCFFSVFAVPWFEQYKILNKSC 134
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                                                                                                                                                                                                                                                                                                                                                                                 1 MARPWOALOLLLAIL-LTLMALPYQARKKTFLSVHEVMAVENYAKD-----SLQWITDQ
                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
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                                                                                                                                                                                                                                                                                                         YNKESDDKYHFRIFRVLKVQRQVTDHLEYHLNVEMQWTTCQKP-----ETTNC-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TEAWVIKFTILNSTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FAYKFLRVRRSLROKYT-LKYLVDLEMGRTLCGKYDEDIDNCPLQEGPGERKVRCTYIVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     YHFRIFRYLKVQRQVTDHLBYHLNVEMQWTTCQK--PETTNCVPQBRBLHKQVNCFFSVF 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WQALQLLLAILLTLMALPYQARKKTFLSV---HSVMAVENYAKDSLQWITDQYNKESDDK
                                                                                                                                                                                                                                                         VQQEK-----LRCNPELLEVPWKNTTQLLKHDC 146
                                                                                                                                                                                                                                                                                                                                                          MERPHPPLAMGLGLLAFCLLTLSPDARAE--LRSRRTGERONLSPDDPRVLKAAQAAVAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                             149 AA;
                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRELIMINARY;
                                                                                                                                                                                             PRELIMINARY;
                                                                                          Chordata;
Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Chordata;
Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             16792 MW; 190DD8A89EC133C0 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                       15.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                           28; Mismatches
                                                                                                                                (Fragment).
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Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Created)
                                                                                                                                                                                                                                                                                                                                                                                                                       Score 114; DB 11;
Pred. No. 0.00032;
                                                                                        Craniata; Vertebrata; E
Sciurognathi; Muridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Craniata; Vertebrata; Buteleostomi; Sciurognathi; Muridae; Murinae; Rat
                                                                                                                                                                                              PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  149
                                                                                                                                                                                             146
                                                                                                       Vertebrata; Euteleostomi;
                                                                                                                                                                                             ₽
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                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 149;
                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                             Murinae;
                                                                                                                                                                                                                                                                                                                                                                                                             26;
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                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                             118
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STRRR

InterPro; IPR000010; Cystatin.
Pfam; PF00031; Cystatin; 1.
SMART; SM00043; CY; 1.
NON TER 1 1
SEQUENCE 146 AA; 16380 MW;

9D77BB9A6063A5C4 CRC64;

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Q9D1B 1D Q9D1B AC Q9D
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RA Kawai J. Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y., RA Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S., RA Arakawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I., RA Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I., RA Aizawa K., Matsuda H.A., Shibori T., Bono H., Kasukawa T., Saito R., RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T., RA Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H., RA Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H., RA Fleischmann W., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T., RA Shrimi L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T., RA Shrimi L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T., RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G., RA Sakai K., Okido T., Fletcher C., Fujita M., Gariboldi M., RA Sakai K., Okido T., Fletcher C., Fujita M., Lee N.H., RA Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P., RA Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P., RA Lyons P., Ranco K., Schoenbach C., Seya T., Shibata Y., Storch K.-F., RA Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F., RA Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local S
Matches 23
                                                                                                                                                                                                                                                                                              [2]
SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
STRAIN=12986/SvEvTac; TISSUE=Spleen;
STRAIN=12986/SvEvTac; TISSUE=Spleen;
Seeuwen P.L.J.M., van Vlijmen-Willems I.M.J.J., Hendriks
Zeeuwen P.L.J.M., van Vlijmen-Willems I.M.J.J., Hendriks
Merkx G.F., Schalkwijk J.;
"A mouse cystatin M/E-null mutation.";
"A mouse cystatin M/E-null mutation.";
"A mouse cystatin M/E-null mutation.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q9D1B1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nature
[2]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hayashizaki Y.; "Functional annotation of a full-length mouse cDNA collection."; Nature 409:685-690(2001).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-JUN-2001 (TrEMBLrel. 17, Created)
01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
1110017E11R1k protein (Cystatin M/E) (Cystatin N homolog).
1110017E1RIK OR CST6.
                                                                                                   The FANTOM Consortium, the RIKEN Genome Exploration Research Group Phase I & II "Analysis of the mouse transcriptome based on functional
                                                                                                                                                                                                                 STRAIN=C57BL/6J; TISSUE=Medulla oblongata; MEDLINE=22354683; PubMed=12466851;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRAIN=C57BL/6J; TISSUE=Embryo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=10090;
                                    60,770 full-length cDNAs.";
Nature 420:563-573(2002).
                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE=21085660; PubMed=11217851;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         107 ELHKOVNCFFSVFAVPWFEQYKILNKSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              56
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       YMMGSDSLYYFRDTKVIDAKYQLVAGIKYYLTLDIESTECRKTRVSGEHMDLTTCPLAAG 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GQQEKLRCNFELLEVPWKNTTQLLKHDC 143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    YNKESDDKYHFRIFRVLKVQRQVTDHLEYHLNVEMQWTTCQKP-----ETTNCVPQER 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15.3%;
nilarity 26.1%;
Conservative 2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 112.5; DB 11; Length Pred. No. 0.00046;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hendriks W.,
                                                                                                              annotation of
                                                                                                                                               Team;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            146;
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HSSP; P01038; 1CEW.

4 MGD; MGI:1920970; Cst6.

R Interpro; IPRO000010; Cystatin.

R Pfam; PF00031; cystatin; 1.

Pfam; PF00031; cystatin; 1.

TOTRNCE 149 AA; 16796 MW;
                                                                                                     Matches
                                                                                                                Query Match
Best Local
                                                                                                                                                                                                       ; AY093591; AAM
; AK078116; BAC
; P01038; 1CEW.
119
                                                  59
                                                                          54
                                                                                                    23;
                                                                                                                 Similarity
                      ELHKQVNCFFSVFAVPWFEQYKILNKSC 134
GQQEKLRĊNFELLEVPWKNTTQLĹKHDĊ
                                                  YNMGSDSLYYFRDTKVIDAKYQLVAGIKYYLTLDIESTECRKTRVSGEHMDLTTCPLAAG 118
                                                                         YNKESDDKYHFRIFRVLKVQRQVTDHLEYHLNVEMQWTTCQKP-----ETTNCVPQER 106
                                                                                                    Conservative
                                                                                                                                                                                                                   AAM11475.1; -. BAC37132.1; -.
                                                                                                               15.3%;
                                                                                                    20; Mismatches
                                                                                                                Score 112.5; DB 1
Pred. No. 0.00047;
                                                                                                                                                       E713EB920E0EFCC5 CRC64;
 146
                                                                                                                            DB 11; Length 149;
                                                                                                     38;
                                                                                                     Indels
                                                                                                    7;
                                                                                                    Gaps
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Search completed: January 21, 2004, 12:08:36 Job time: 56.8 secs

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Regult
No.
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Maximum DB seq length: 200000000
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Maximum Match 100%
Listing first 45 summaries
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Scoring table:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                          Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Published Applications AA:*

1: /cgm2_6/ptodata/2/pubpaa/US07 PUBCOMB.pep:*

2: /cgm2_6/ptodata/2/pubpaa/US06 NEW PUB.pep:*

3: /cgm2_6/ptodata/2/pubpaa/US06 NEW PUB.pep:*

4: /cgm2_6/ptodata/2/pubpaa/US06_PUBCOMB.pep:*

5: /cgm2_6/ptodata/2/pubpaa/US06_PUBCOMB.pep:*

6: /cgm2_6/ptodata/2/pubpaa/US08_NEW PUB.pep:*

7: /cgm2_6/ptodata/2/pubpaa/US08_NEW PUB.pep:*

8: /cgm2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*

9: /cgm2_6/ptodata/2/pubpaa/US09B_PUBCOMB.pep:*

10: /cgm2_6/ptodata/2/pubpaa/US09B_PUBCOMB.pep:*

11: /cgm2_6/ptodata/2/pubpaa/US09C_PUBCOMB.pep:*

12: /cgm2_6/ptodata/2/pubpaa/US09C_PUBCOMB.pep:*

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14: /cgm2_6/ptodata/2/pubpaa/US09C_PUBCOMB.pep:*

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16: /cgm2_6/ptodata/2/pubpaa/US10C_PUBCOMB.pep:*

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18: /cgm2_6/ptodata/2/pubpaa/US10C_PUBCOMB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                       Query
Match
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Gapop 10.0 , Gapext 0.5
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736
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39.1
37.1
37.0
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1117
1117
1115
59
59
50
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146
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33
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                 10 US-09-941-314-2
10 US-09-941-314-4
10 US-09-941-314-15
10 US-09-941-314-15
10 US-09-941-314-14
10 US-09-941-314-17
10 US-09-941-314-17
10 US-09-941-314-17
10 US-09-941-314-17
10 US-09-941-314-10
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                    Sequence 2, Appli
Sequence 4, Appli
Sequence 3, Appli
Sequence 15, Appl
Sequence 14, Appl
Sequence 14, Appl
Sequence 17, Appl
Sequence 13, Appl
Sequence 34822, A
Sequence 48936, A
Sequence 10, Appl
Sequence 10, Appli
Sequence 6, Appli
Sequence 6, Appli
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ALIGNMENTS

RESULT 1 US-09-941-314-2

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CURRENT APPLICATION NUMBER: US/09/941,314
CURRENT FILING DATE: 2001-08-29
PRIOR APPLICATION NUMBER: 60/230,230
PRIOR FILING DATE: 2001-09-01
NUMBER OF SEQ ID NOS: 19
SOFTWARE: PASTSEQ for Windows Version 4.0
SEQ ID NO 2
SEQ ID NO 2
LENGTH: 137
TYPE: PRT
ORGANISM: Homo sapiens
US-09-941-314-2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 2, Application US/09941314
Patent No. US20020142396A1
GENERAL INFORMATION:
APPLICANT: ZymoGenetics, Inc.
TITLE OF INVENTION: Mammalian Cystatin-8 and Its Use to
TITLE OF INVENTION: Inhibit Cancer Procoagulant Protein
FILE REFERENCE: 00-81PC
                                                                                                                                                                                                                                                                Query Match 100.0%;
Best Local Similarity 100.0%;
                                                                                                                                                                                                                                               Matches 137; Conservative
121 VPWFEQYKILNKSCSSD 137
                            121 VPWFBQYKILNKSCSSD 137
                                                                                 13
                                                                                                                61 KYHFRIFRVLKVQRQVTDHLEYHLNVEMQWTTCQKPETTNCVPQERELHKQVNCFFSVFA 120
                                                                                                                                                                                       1 MABPWQALQLLLAILLTLMALPYQARKKTFLSVHEVMAVENYAKDSLQWITDQYNKESDD
                                                                                 KYHFRIFRVLKVQRQVTDHLBYHLNVEMQWTTCQKPETTNCVPQERELHKQVNCFFSVFA
                                                                                                                                                                                                                                                 0; Mismatches
                                                                                                                                                                                                                                                                    Score 736; DB 10;
Pred. No. 5.8e-73;
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                                                                                                                                                                                                                                                                                        Length 137;
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120

60 60 0

35.6 35.6 34.5

Sequence

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; Sequence 15, Application US/09941314; Patent No. US20020142396A1; GENERAL INFORMATION:
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US-09-941-314-3
                                                                                       RESULT 4
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US-09-941-314-4
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APPLICANT: ZymoGenetics, Inc.

TITLE OF INVENTION: Mammalian Cystatin-8 and Its Use to

TITLE OF INVENTION: Inhibit Cancer Procoagulant Protein

FILE REFERENCE: 00-81.PC

CURRENT APPLICATION NUMBER: US/09/941,314

CURRENT FILING DATE: 2001-08-29

PRIOR APPLICATION NUMBER: 60/230,230

PRIOR APPLICATION NUMBER: 60/230,230

PRIOR FILING DATE: 2001-09-01

NUMBER OF SEQ ID NOS: 19

SOPTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQ ID NO 3
LENGTH: 115
TYPE: PRT
ORGANISM: Homo sapiens
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                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local (
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Patent No. US20020142396A1
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: 60/230,230 PRIOR FILING DATE: 2001-09-01 NUMBER OF SEQ ID NOS: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILE REFERENCE: 00-81PC
CURRENT APPLICATION NUMBER: US/09/941,314
CURRENT FILING DATE: 2001-08-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: ZymoGenetics, Inc.
TITLE OF INVENTION: Mammalian Cystatin-8 and Its Use to
TITLE OF INVENTION: Inhibit Cancer Procoagulant Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 117
                                                                                                                                                                                                                                                                                                                                                y Match 85.5%; Score 629; DB 10; Local Similarity 100.0%; Pred. No. 2.6e-61;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           117;
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                                                                                                                                                                                                                                                                                                                              115; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21 LPYQARKKTFLSVHEVMAVENYAKDSLQWITDQYNKESDDKYHFRIFRVLKVQRQVTDHL 80
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                                                                                                                                                                                                                                                                               YQARKKTFLSVHEVMAVENYAKDSLQWITDQYNKESDDKYHFRIFRVLKVQRQVTDHLEY 82
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                                                                                                                                                      HLNVEMOWTTCQKPETTNCVPQERELHKQVNCFFSVFAVPWFEQYKILNKSCSSD 115
                                                                                                                                                                                                                                YQARKKTELSVHEVMAVENYAKDSLQWITDQYNKESDDKYHFRIFRVLKVQRQVTDHLEY
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APPLICANT: ZymoGenetics, Inc.
TITLE OF INVENTION: Mammalian Cystatin-8 and Its Use to
TITLE OF INVENTION: Inhibit Cancer Procoagulant Protein
FILE REFERENCE: 00-81PC
CURRENT APPLICATION NUMBER: US/09/941,314
CCURRENT FILING DATE: 2001-08-29
PRIOR APPLICATION NUMBER: 60/230,230
PRIOR APPLICATION NUMBER: 60/230,230
PRIOR FILING DATE: 2001-09-01
NUMBER OF SEQ ID NOS: 19
SOFTWARE: FastSEQ for Windows Version 4.0
TYPE: PRT
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US-09-941-314-15
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GENERAL INFORMATION:
APPLICANT: ZymoGenetics, Inc.
TITLE OF INVENTION: Mammalian Cystatin-8 and Its Use to
TITLE OF INVENTION: Inhibit Cancer Procoagulant Protein
FILE REFERENCE: 00-81PC
CURRENT APPLICATION NUMBER: US/09/941,314
CURRENT FILING DATE: 2001-08-29
PRIOR APPLICATION NUMBER: 60/230,230
PRIOR PRILING DATE: 2001-09-01
NUMBER OF SEQ ID NOS: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQ ID NOS: 19
SOPTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 16
LENGTH: 59
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 16, Application US/09941314 Patent No. US20020142396A1 GENERAL INFORMATION:
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Patent No. US20020142396A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
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Best Local (
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Best Local
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TITLE OF INVENTION: Mammalian Cystatin-8 and Its Use to
TITLE OF INVENTION: Inhibit Cancer Procoagulant Protein
FILE REFERENCE: 00-81PC
CURRENT APPLICATION NUMBER: US/09/941,314
CURRENT FILING DATE: 2001-08-29
PRIOR APPLICATION NUMBER: 60/230,230
PRIOR FILING DATE: 2001-09-01
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                                                                                                                                                                                                                                                                                                                                                                                               74 RQVTDHLEYHLNVEMQWTTCQKPETTNCVPQERELHKQVNCFFSVFAVPWFEQYKILNK 132
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              59;
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08
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 45.4%; Score 334; DB 10; Length 100.0%; Pred. No. 2.7e-29;
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; ORGANISM: Homo sapiens US-09-941-314-14

SEQ ID NO 14

ENGTH:

52

SOFTWARE: FastSEQ for Windows Version 4.0

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US-09-941-314-17
; Sequence 17, App
; Patent No. US200
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US-09-941-314-13
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US-09-941-314-17
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APPLICANT: ZymoGenetics, Inc.
TITLE OF INVENTION: Mammalian Cystatin-8 and Its
TITLE OF INVENTION: Inhibit Cancer Procoagulant
                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 13, Application US/099
Patent No. US20020142396A1
GENERAL INFORMATION:
APPLICANT: ZymoGenetics, Inc.
                                                                                                                                                                                                        NUMBER OF SEQ ID NOS: 19
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 37.1
Best Local Similarity 100.
Matches 48; Conservative
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                                                                         Query Match
Best Local Similarity
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                                                           Matches
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                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: Mammalian Cystatin-8 and Its TITLE OF INVENTION: Inhibit Cancer Procoagulant FILE REFERENCE: 00-81PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILE REFERENCE: 00-81PC
CURRENT APPLICATION NUMBER: US/09/941,314
CURRENT FILING DATE: 2001-08-29
                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/09/941,314
CURRENT FILING DATE: 2001-08-29
PRIOR APPLICATION NUMBER: 60/230,230
PRIOR FILING DATE: 2001-09-01
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Local Similarity 100.0%; F
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52 DQYNKESDDKYHFRIFRVLKVQRQVTDHLEYHLNVEMQWTTCQKFETTN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                85 NVEMOWTTCOKPETTNCVPOERELHKOVNCFFSVFAVPWFEOYKILNK 132
                                                           49;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               Application US/09941314
                                                       37.0%; So ilarity 100.0%; I Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 37.1%; Score 273; DB 10; 100.0%; Pred. No. 1.1e-22; tive 0; Mismatches 0;
                                                         Score 272; DB 10;
; Pred. No. 1.4e-22;
0; Mismatches 0;
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Pred. No.
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CURRENT APPLICATION NUMBER: US/09/864,761
CURRENT FILING DATE: 2001-05-23
PRIOR APPLICATION NUMBER: US 60/180,312
PRIOR FILING DATE: 2000-02-04
PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR APPLICATION NUMBER: US 60/32,366
PRIOR FILING DATE: 2000-08-03
PRIOR FILING DATE: 2000-09-03
PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR FILING DATE: 2000-09-27
PRIOR APPLICATION NUMBER: PCT/US01/00666
PRIOR APPLICATION NUMBER: PCT/US01/00667
PRIOR APPLICATION NUMBER: PCT/US01/00667
PRIOR PILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00664
PRIOR APPLICATION NUMBER: PCT/US01/00665
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: US 09/774,203
PRIOR FILING DATE: 2001-01-29
NUMBER OF SEQ ID NOS: 49117
SOFTWARE: Annomax Sequence Listing Engine vers. 1.1
SEQ ID NO 34822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
APPLICANT: Penn, Sharron G.
APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K.
APPLICANT: Chen, Wensheng
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                                                                                                                                                                                                              PEATURE:
PEATURE INFORMATION: MAP TO AL109954.10
OTHER INFORMATION: EXPRESSED IN BONE N
OTHER INFORMATION: EXPRESSED IN LUNG,
OTHER INFORMATION: EXPRESSED IN BRAIN
OTHER INFORMATION: EXPRESSED IN PACE
OTHER INFORMATION:
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PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00670
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: US 60/234,687
PRIOR FILING DATE: 2000-09-21
PRIOR FILING DATE: 2000-09-21
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                            EXPRESSED
                                                 ED IN BONE MARROW, SIGNAL = 1.5
ED IN LUNG, SIGNAL = 1.5
ED IN BRAIN, SIGNAL = 1.8
ED IN PLACENTA, SIGNAL = 1.7
ED IN ADULT LIVER, SIGNAL = 1.7
ED IN PETAL LIVER, SIGNAL = 1.5
ED IN BT474, SIGNAL = 1.5
ED IN HEART, SIGNAL = 1.5
ED IN HEART, SIGNAL = 1.3
L100, SIGNAL = 1.2
AI200857.1, EVALUE 5.00e-23
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HIT: 060676, EVALUE 1.00e-01

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; OTHER INFORMATION: MAP TO AL096677.18
; OTHER INFORMATION: EXPRESSED IN BT474, SIGNAL = 0.96
; OTHER INFORMATION: EST_HUMAN HIT: AI200857.1, EVALUE 5.00e-23
; OTHER INFORMATION: SWISSPROT HIT: O60676, EVALUE 1.00e-01
US-09-864-761-48936
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CURRENT FILING DATE: 2001-05-23
PRIOR APPLICATION NUMBER: US 60/180,312
PRIOR FILING DATE: 2000-02-04
PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: US 09/632,366
PRIOR APPLICATION NUMBER: US 09/632,366
PRIOR FILING DATE: 2000-08-03
                                                                                                                                                                                                                     SEQ ID NO 48936
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NUMBER OF SEQ ID NOS: 49117
SOFTWARE: Annomax Sequence Listing Engine vers.
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                                                                                                                                         ORGANISM: Homo sapiens
                                                                                                                       FEATURE:
                                                                                                                                                                             TYPE: PRT
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FILING DATE: 2001-01-30
APPLICATION NUMBER: PCT/US01/00661
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APPLICATION NUMBER: PCT/US01/00664
FILING DATE: 2001-01-30
APPLICATION NUMBER: PCT/US01/00669
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APPLICATION NUMBER: US 09/608,408
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                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 2000-06-30
                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 60/234,687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: PCT/US01/00670
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Hanzel, David K.
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llarity 100.0%; Pred. No. 1.8e-21;
Conservative 0; Mismatches 0;
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US-09-941-314-10
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US-09-941-314-10
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                                                                                                                                                           NUMBER OF SEQ ID NOS: 19
SOPTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 12
LENGTH: 33
TYPE: PRT
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Patent No. US20020142396A1
GENERAL INFORMATION:
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                                                               Matches
                                                                                             Query Match
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Best Local Similarity
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Best Local Similarity
                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/09/941,314
CURRENT FILING DATE: 2001-08-29
PRIOR APPLICATION NUMBER: 60/230,230
PRIOR FILING DATE: 2001-09-01
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CURRENT FILING DATE: 2001-08-29
PRIOR APPLICATION NUMBER: 60/230,230
PRIOR FILING DATE: 2001-09-01
                                                                                                                                                                                                                                                                                                        APPLICANT: ZymoGenetics, Inc.
TITLE OF INVENTION: Mammalian Cystatin-8 and Its
TITLE OF INVENTION: Inhibit Cancer Procoagulant
FILE REFERENCE: 00-81PC
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TITLE OF INVENTION: Mammallan Cystatin-8 and Its Use to
TITLE OF INVENTION: Inhibit Cancer Procoagulant Proteir
FILE REFERENCE: 00-81PC
                                                                                                                                            ORGANISM: Homo sapiens
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TYPE: PRT
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                                                                            Local Similarity
                  75 QVTDHLEYHLNVEMQWTTCQKPETTNCVPQERE 107
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QVTDHLEYHLNVEMQWTTCQKPETTNCVPQERE
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100.0%; Prr
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Pred. No. 1.2e-20;
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Pred. No. 1.8e-21;
                                                                           Score 189; DB 10;
Pred. No. 1.1e-13;
                                                            Mismatches
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RESULT 13 US-09-941-314-6

Application US/09941314

GENERAL INFORMATION: Patent No. US20020142396A1

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GENERAL INFORMATION:

APPLICANT: ZymoGenetics, Inc.

TITLE OF INVENTION: Mammalian Cystatin-8 and Its Use to

TITLE OF INVENTION: Inhibit Cancer Procoagulant Protein

PILE REPERENCE: 00-81PC

CURRENT APPLICATION NUMBER: US/09/941,314

CURRENT FILING DATE: 2001-08-29

PRIOR APPLICATION NUMBER: 60/230,230

PRIOR APPLICATION NUMBER: 60/230,230

PRIOR APPLICATION NUMBER: 60/230,230

PRIOR PILING DATE: 2001-09-01

NUMBER OF SEQ ID NOS: 19

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 8

SECONDER 18
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; Sequence 46, Application US/10376564
; Publication No. US20030180302A1
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US-09-941-314-8
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Matches
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Best Local Similarity
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Patent No. US20020142396A1
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            APPLICANT: Wolf, Eckhard
APPLICANT: Werner, Sabine
APPLICANT: Halle, Jorn-Peter
APPLICANT: Regenbogen, Johannes
APPLICANT: Regenbogen, Johannes
APPLICANT: Goppelt, Andreas
TITLE OF INVENTION: Use of Polypeptides or Nucleic Acids for
TITLE OF INVENTION: the Diagnosis or Treatment of Skin Disorders and Wound
TITLE OF INVENTION: Healing and for the Identification of Pharmacologically
TITLE OF INVENTION: Active Substances
FILE REFERENCE: 50125/014003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity
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TITLE OF INVENTION: Mammalian Cystatin-8 and Its Use to
TITLE OF INVENTION: Inhibit Cancer Procoagulant Protein
FILE REPERENCE: 00-81PC
CURRENT APPLICATION NUMBER: US/09/941,314
CURRENT FILING DATE: 2001-08-29
PRIOR APPLICATION NUMBER: 60/230,230
PRIOR APPLICATION NUMBER: 60/230,230
PRIOR PILING DATE: 2001-09-01
NUMBER OF SEQ ID NOS: 19
CURRENT APPLICATION NUMBER: US/10/376,564
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TYPE: PRT
ORGANISM: Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQ ID NOS: 86
SOPTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 46
LENGTH: 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT FILING DATE: 2003-02-28
PRIOR APPLICATION NUMBER: US 09/886,319
PRIOR FILING DATE: 2001-06-20
PRIOR APPLICATION NUMBER: US 60/222,081
PRIOR APPLICATION NUMBER: US 60/222,081
PRIOR FILING DATE: 2000-08-01
PRIOR APPLICATION NUMBER: DE 100 30 149.5-41
PRIOR FILING DATE: 2000-06-20
                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
                                       118 VFAVPWFEQYKILNKSCSS 136
121 IYSVPWKGTHSLTKFSCKN 139
                                                                              61 AYHSRAIQVVRARKOLVAGVNYFLDVEMGRTTCTKSQTNLTDCPFHDQPHLMRKALCSFQ 120
                                                                                                        61 KYHFRIFRVLKVQRQVTDHLEYHLNVEMQWTTCQKFBT--TNC-VPQBRELHKQVNCFFS 117
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Search completed: January 21, 2004, 12:17:39 Job time: 49.6129 secs

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       Copyright
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G:Species: Nostoc sp. PCC 7120
A;Note: Nostoc sp. Strain PCC 7120 is a synonym of Anabaena sp. strain PCC 7120
C;Date: 14-Dec-2001 #sequence_revision 14-Dec-2001 #text_change 09-Dec-2002
C;Accession: AP2277
R;Kaneko, T.; Nakamura, Y.; Wolk, C.P.; Kuritz, T.; Sasamoto, S.; Watanabe, A.; Iriguchi Nakazaki, N.; Shimpo, S.; Sugimoto, M.; Takazawa, M.; Yamada, M.; Yasuda, M.; Tabata, S. DNA Res. 8, 205-213, 2001
A;Title: Complete Genomic Sequence of the Filamentous Nitrogen-fixing Cyanobacterium Anal A;Reference number: AB1807; MUID:21595285; PMID:11759840
A;Recession: AP2277
A;Status: preliminary
A;Rolecule type: DNA
A;Residues: 1-707 - KUR>
A;Residues: 1-707 - KUR>
                                                   A;Cross-references: GB:BA000019; PIDN:BAB75472.1; PID:g17132907; GSPDB:GN00179
A;Experimental source: strain PCC 7120
C;Genetics:
A;Gene: all3773
     Query Match
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Result

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R;Wall, M.
submitted to the EMBL Data Library,
n.pafarence number: Z20257
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C;Species: Caenorhabditis elegans
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 15-Oct-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    hypothetical protein F33D4.2c - Caenorhabditis elegans C;Species: Caenorhabditis elegans C;Species: Caenorhabditis elegans C;Date: 29-Oct1999 #sequence_revision 29-Oct-1999 #text_change 01-Dec-2000 C;Accession: T32552; T32551
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A;Cross-references: EMBL:AF036702; PIDN:AAB88375.1; GSPDB:GN00022;
                                                                                                                                                                                                                                                                                                                                                                          A;Residues: 1-1966 <JOH>
A;Cross-references: EMBL:AF036702; PIDN:AAB88380.1; GSPDB:GN00022; CESP:F33D4.2c
A;Experimental source: strain Bristol N2; clone F33D4
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A;Accession: T32552
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A;Experimental source: clone Y39AlA
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A;Accession: T26742
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Best Local
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100.0%; F1
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100.0%; Pred. No.
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                                                   R;Shirai, M.; Hirakawa, H.; Kimoto, M.; Tabuchi, M.; Kishi, Nucleic Acids Res. 28, 2311-2314, 2000
A;Title: Comparison of whole genome sequences of chlamydia A;Reference number: A86491, MUID:20330349; PMID:10871362
A;Accession: C86497
                                                                                                                                             hypothetical protein CPj0050 [imported] - Chlamydophila pneumoniae (strain J138) C;Species: Chlamydophila pneumoniae, Chlamydia pneumoniae C;Date: 02-Mar-2001 #sequence_revision 02-Mar-2001 #text_change 02-Mar-2001 C;Accession: C86497
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A; Molecule type:
                                   A; Status: preliminary
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DNA

M.; Tabuchi, M.; Kishi,

Shiba,

Τ., IBI

pneumoniae F.; Ouchi, K.;

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R;JOhnson, D.; Steilyes, L.
submitted to the EMBL Data Library, December 1997
A;Description: The sequence of C. elegans cosmid F33D4
A;Reference number: Z21190
                                                                                                                                                                                                                                                                                                                     C;Date: 12-Feb-1998 #sequence_revision 20-Feb-1998 #text_change 08-Oct-1999
C;Accession: S70178; S49209
C;Accession: Holl, A.W.; Hamblin, P.A.; Packer, H.L.; Armitage, J.P.
Mol. Microbiol. 17, 357-366, 1995
A;Title: Identification of a chemotaxis operon with two che Y genes in Rhodobacter sphaes
A;Reference number: S70178; MUID:96079285; PMID:7494484
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C;Superfamily: inositol-trisphosphate receptor
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A;Introns: 48/2; 117/3; 167/3; 263/3; 316/3; 362/1; 378/2; 396/1; 436/3; 509/3; 658/3;
A;Introns: 48/2; 117/3; 2597/1; 2823/3
/1; 2324/3; 2430/1; 2492/3; 2597/1; 2823/3
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C;Species: Caenorhabditis elegans
C;Date: 29-Oct-1999 #sequence_revision 29-Oct-1999 #text_change 21-Jan-2000
                                                                                                                                                                    A;Cross-references: EMBL:X80027; NID:g510668; PIDN:CAA56328.1; PID:g510669
A;Experimental source: strain WS8-N
A;Note: the nucleotide sequence was submitted to the EMBL Data Library, Ju
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A;Residues: 1-2848 <JOH>
A;Cross-references: EMBL:AF036702; PIDN:AAB88374.1; GSPDB:GN00022;
A;Experimental source: strain Bristol N2; clone F33D4
                                                                                                                                                                                                                                    A; Molecule type: DNA
A; Residues: 1-75 < WAR>
                                                                                                                                                                                                                                                                               A; Status: nucleic acid sequence not shown; translation not shown
                                                                                                                                                                                                                                                                                                       A; Accession: S70178
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C;Species: Rhodobacter sphaeroides
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A;Cross-references: GB:BA000008; NID:g8978424; PIDN:BAA98261.1; GSPDB:GN00142
A;Experimental source: strain J138
C;Genetics:
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A;Residues: 1-105 <ARN>
A;Cross-references: GB:AE001590; GB:AE001363; NID:g4376299; PIDN:AAD18203.1; PID:g437630
A:Experimental source: strain CWL029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Title: Comparative genomes of Clamydia pneumoniae and C. trachomatis. A;Reference number: A72000; MUID:99206606; PMID:10192388 A;Accession: H72125
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                                                                                                                                                         C;Superfamily: influenza virus nonstructural protein NS2 C;Keywords: alternative splicing; nonstructural protein
                                                                                                                                                                                                                                                                                                                       R;Nakajima, K.; Nobusawa, B.; Ogawa, T.; Nakajima, S.
Virology 158, 465-468, 1987
A;Title: Genetic divergence of the NS genes of avian influenza viruses.
A;Reference number: A94361; MUID:87236215; PMID:2954302
                                                                                                                                                                                                                                                                                                                                                                                     nonstructural protein NS2 - influenza A virus (strain A/Duck/England/56 [H11N6]) (fragme
C;Species: influenza A virus
C;Date: 30-Sep-1989 #sequence_revision 30-Sep-1989 #text_change 16-Jul-1999
C;Accession: D27846
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;Residues: 1-118 <NAK>
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Pred. No.
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                                   C;Accession: B27846
R;Nakajima, K.; Nobusawa, B.; Ogawa, T.; Nakajima, S.
Virology 158, 465-468, 1987
A;Title: Genetic divergence of the NS genes of avian influenza
A;Reference number: A94361; MUID:87236215; PMID:2954302
                                                                                                        nonstructural protein NS2 - influenza A virus (strain A/Chicken/Japan/24 [H7N7]) (fragmen C;Species: influenza A virus (C;Date: 30-Sep-1989 #sequence_revision 30-Sep-1989 #text_change 16-Jul-1999 C;Accession: B27846
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A;Molecule type: genomic RNA
A;Residues: 1-118 <NAK>
                                A;Accession: B27846
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RESULT

A;Cross-references: GB:M16561;

NID: g324777; PIDN: AAA43505.1;

PID: g324779

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R;Nakajima, K.; Nobusawa, B.; Ogawa, T.; Nakajima, S.
Virology 158, 465-468, 1987
A;Title: Genetic divergence of the NS genes of avian influenza viruses.
A;Reference number: A94361; MUID:87236215; PMID:2954302
                                                                                                                                                                                                                                                                                                                                                                                                                                                             C;Species: influenza A virus
C;Date: 30-Sep-1989 #sequence_revision 30-Sep-1989 #text_change
C;Accession: H27846
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A;Title: Genetic divergence of the NS genes of avian influenza viruses. A;Reference number: A94361; MUID:87236215; PMID:2954302
A;Accession: A30086
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C;Date: 30-Sep-1989 #sequence_revision 30-Sep-1989 #text_change 16-Jul-1999
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A; Introns: 7/3
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A; Residues: 1-118 < NAK>
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A; Introns: 7/3
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Best Local
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                                                                             Similarity 7; Conserv
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QALQLLL 104
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Mismatches
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A; Map position:
A; Introns: 7/3
C; Superfamily: i
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A;Title: Sequential mutations in the NS genes of influenza
A;Reference number: A92991; MUID:83164298; PMID:6834468
                                                                                                                                                                                                                                                                                                                       nonstructural protein NS2 - influenza A virus (strain A/FW/1/50 [H1N1]) C;Species: influenza A virus (c;Species: influenza A virus C;Species: influenza A virus C;Species: influenza H virus C;Bace: 19-May-1994 #sequence revision 19-May-1994 #text_change 24-Sep-1999 C;Baccession: C92991; A04095
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                                                                                                                            C; Superfamily: influenza virus no C; Keywords: alternative splicing
                                                                                                                                          A;Map position: segment 8 C;Superfamily: influenza virus nonstructural protein
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A; Residues: 1-121 < KRY>
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A;Gene: NS2
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C/Species: influenza A virus
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Keywords: alternative splicing; nonstructural protein;
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erences: GB:M16564;
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Virology 171, 1-9, 1989
A;Title: The B allele of the NS gene of avian influenza
A;Title: The B allele of the NS gene of avian influenza
A;Title: The B allele of the NS gene of avian influenza
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A;Title: The B allele of the NS gene of avian influenza viruses,
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A;Title: Subtype H7 influenza viruses: comparative antigenic A;Reference number: A45539; MUID:92109567; PMID:1530908
A;Accession: E45539
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B45539
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A; Introns: 10/3
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                                                                                                                                               nonstructural protein NS2 -
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                                                                                     ;Species: influenza A virus
;Date: 31-Mar-1991 #sequence_revision
;Accession: F32662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;Molecule type: genomic RNA;Residues: 1-121 <TR2>
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;Date: 31-Mar-1991 #sequence_revision 31-Mar-1991 #text_change 19-Oct-1995
;Accession: B32662; D32662
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;Residues: 1-121 <KLI>
                                                                       ;Treanor,
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                                                                   J.J.; Snyder, M.H.; London, W.T.; Murphy,
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                                                                                                                                               influenza A virus (strain A/mallard/New York/6874/78)
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Pred. No.
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viruses,

but not the

A allele,

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A;Cross-references: GB:J02105; GB:M17071; NID:g324783; PIDN:AAA43508.1; PID:g324784
A;Experimental source: strain A/duck/Alberta/60/76
R;Norton, G.P.; Tanaka, T.; Tobita, K.; Nakada, S.; Buonagurio, D.A.; Greenspan, D.; Kry
Virology 156, 204-213, 1987
A;Title: Infectious influenza A and B virus variants with long carboxyl terminal deletic
A;Reference number: A27529; MUID:87122162; PMID:3811235
A;Accession: B27529
A;Molecule type: genomic RNA
A;Residues: 1-121 <NOR>
A;Experimental source: strain A/turkey/Oregon/71 [H7N5]
C;Genetics:
A;Map position: segment 8
                                                                                                                                                                                                                      A;Map position: segment 8
A;Introns: 10/3
A;Introns: 10/3
C;Superfamily: influenza virus nonstructural protein NS2
C;Keywords: alternative splicing; nonstructural protein
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A;Molecule type: genomic
A;Residues: 1-121 <TRE>
C;Genetics:
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A;Title: The B allele of the NS gene of avian influenza
A;Reference number: A32662; MUID:89299445; PMID:2525836
A;Accession: H32662
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C;Species: influenza A virus
C;Date: 31-Mar-1991 #sequence_revision 31-Mar-1991 #text_change 08-Apr-1994
C;Accession: H32662
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C; Genetics:
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A; Residues: 1-121 < TRE>
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RESULT MNIVB7

nonstructural protein NS2 - influenza A virus (strain A/pintail/Alberta/121/79)

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A;Map position: segment 8
A;Introns: 10/3
C;Superfamily: influenza v
C;Keywords: alternative sp
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A;Title: The B allele of the NS gene of avian influenza viruses, A;Reference number: A32662; MUID:89299445; PMID:2525836
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A;Introns: 10/3
C;Superfamily: influenza virus nonstructural protein NS2
C;Keywords: alternative splicing; nonstructural protein
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A;Title: The B allele of the NS gene of avian influenza viruses, A;Reference number: A32662; MUID:89299445; PMID:2525836
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C;Species: influenza A virus
C;Date: 31-Mar-1991 #sequence_revision 31-Mar-1991 #text_change 08-Apr-1994
C;Accession: B32663
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Pred. No. 9.6;
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A;Note: sequence extracted from NCBI backbone (NCBIN:108102, NCBIP:108104) C;Superfamily: influenza virus nonstructural protein NS2 C;Keywords: alternative splicing; nonstructural protein
                                                                   A;Molecule type: genomic RNA
A;Residues: 1-121 <PER:
A;Experimental source: A/Turkey/Wisconsin/68, H5N9
A;Note: sequence inconsistent with the nucleotide translation
                                                                                                                                                              A;Title: Naturally occurring NS gene variants in an avian influenza virus isolate. A;Reference number: A45575; MUID:92327829; PMID:1320795 A;Accession: B45575
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A;Introns: 10/3
C;Superfamily: influenza 1
C;Keywords: alternative 8
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C; Genetics:
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A;Title: The B allele of the NS gene of avian influenza viruses,
A;Reference number: A32662; MUID:89299445; PMID:2525836
A;Accession: H32663
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C;Date: 31-Mar-1991 #sequence_revision 31-Mar-1991 #text_change 08-Apr-1994
C;Accession: H32663
R;Treanor, J.J.; Snyder, M.H.; London, W.T.; Murphy, B.R.
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A;Title: The B allele of the NS gene of avian influenza viruses, A;Reference number: A32662; MUID:89299445; PMID:2525836
A;Accession: F32663
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A; Residues: 1-121 <TRE>
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Keywords: alternative splicing; nonstructural protein
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mes 7; Conservative 0;
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100.0%; Pred. No. 9.6;
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th, T.; Commerce., S.; Moule, S.; O'Gaora, P.
S.; Moule, S.; O'Gaora, P.
Nature 413, 848-852, 2001
Nature 413, 848-852, 2001
A;Authors: Parry, C.; Quail, M.; Rutherford, K.; Simmonds, M.; Skelton, J.; Stevens, K.; A;Authors: Parry, C.; Quail, M.; Rutherford, K.; Simmonds, M.; Skelton, J.; Stevens, K.; A;Title: Complete genome sequence of a multiple drug resistant Salmonella enterica serova A;Title: Complete genome sequence of a multiple drug resistant Salmonella enterica serova
                                                                                                                                                                                                                                                                                                                                                                                                                                                           probable membrane protein STY4797 [imported] - Salmonella enterica subsp. enterica serova C;Species: Salmonella enterica subsp. enterica serovar Typhi A;Note: this species has also been called Salmonella typhi C;Date: 09-Nov-2001 #sequence_revision 09-Nov-2001 #text_change 18-Nov-2002 C;Accession: AII058
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C;Species: influenza A virus
A;Variety: strain A/WS/33
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S33685
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A; Residues: 1-148 < PAR >
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A;Cross-references: GB:AE001642; GB:AE001363; NID:g4376865; PIDN:AAD18714.1; PID:g437686 A;Experimental source: strain CWL029 A;Experimental source: strain CWL029 A;Experimental source: strain CWL029 A;R.; Heidelberg, J.F.; White, O.; Hickey, R;Read, T.D.; Brunham, R.C.; Shen, C.; Gill, S.R.; Heidelberg, J.; WcClarty, G.; Salzberg, C.; Dodson, R.; Gwinn, M.; Nelson, W.; DeBoy, R.; Kolonay, J.; McClarty, G.; Salzberg, Nucleic Acids Res. 28, 1397-1406, 2000 A;Title: Genome sequences of Chlamydia trachomatis MoPn and Chlamydia pneumoniae AR39. A;Reference number: A81500; MUID:20150255; PMID:10684935
hypothetical protein CPj0574 [imported] - Chlamydophila pneumoniae (strain J138) C;Species: Chlamydophila pneumoniae, Chlamydia pneumoniae C;Date: 02-Mar-2001 #sequence_revision 02-Mar-2001 #text_change 02-Mar-2001 C;Accession: B86562 R;Shirai, M.; Hirakawa, H.; Kimoto, M.; Tabuchi, M.; Kishi, F.; Ouchi, K.; Shiba,
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C;Species: Aeropyrum pernix
C;Date: 20-Aug-1999 #sequence_revision 20-Aug-1999 #text_change 20-Aug-1999
C;Accession: B72717
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A; Residues: 1-184 < ARN>
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A;Molecule type: DNA
A;Residuss: 1-164 <KAW>
A;Cross-references: DDBJ:AP000059; NID:g5103911; PIDN:BAA79230.1; PID:d1043016; PID:g5104;Experimental source: strain K1
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A; Residues: 1-184 < REA>
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A;Accession: B72717
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Matches
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Experimental source: strain AR39, HL cells
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A;Cross-references: GB:BA000007; PIDN:BAB35714.1; PID:g13361757; GSPDB:GN00154
A;Experimental source: strain O157:H7, substrain RIMD 0509952
C;Genetics:
A;Gene: EG82291
C;Superfamily: Escherichia coli ynfC protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       M.; Ohfuku, Y.; Funahashi, T.; Tanaka, T.; Kudoh, Y.; Yamazaki, J.; Kushida, N.; Ogucl DNA Res. 5, 55-76, 1998
A;Title: Complete sequence and gene organization of the genome of a hyper-thermophilic A;Reference number: A71000; MUID:98344137; PMID:9679194
A;Accession: C71159
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A,Title: Comparison of whole genome sequences of chlamydia pneumoniae A,Reference number: A86491; MUID:20330349; PMID:10871362
A,Accession: B86562
A,Status: preliminary
A,Status: preliminary
                                                                                                                                                                                                                                                                                                                hypothetical protein ECs2291 [imported] - Escherichia coli (strain O157:H7, C;Species: Escherichia coli C;Date: 18-Jul-2001 #sequence_revision 18-Jul-2001 #text_change 03-Aug-2001 C;Accession: C90915
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C;Superfamily:
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R;Kawarabayasi, Y
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A;Residues: 1-184 <STO>
A;Cross-references: GB:BA000008; NID:g8978945; PIDN:BAA98780.1; GSPDB:GN00142
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A; Residues: 1-225 < KAW >
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                                                                                                                    A;Residues: 1-248 <HAY>
                                                                                                                                     A; Molecule type: DNA
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    Y.; Sawada, M.; Horikawa, H.; Haikawa, Y.; Hino, Y.; Yamamoto, S.
    Y.; Funahashi, T.; Tanaka, T.; Kudoh, Y.; Yamazaki, J.; Kushida, N.;

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RESULT 33
C86687
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R;Stover, C.K.; Pham, X.Q.; Erwin, adman, S.; Yuan, Y.; Brody, L.L.; (
.; Lory, S.; Olson, M.V.
Nature 406, 959-964, 2000
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A;Title: Genome sequence of enterohemorrhagic Escherichia coli O157:H7.
A;Reference number: A85480; MUID:21074935; PMID:11206551
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H85763
hypothetical protein yejI [imported] C; Species: Lactococcus lactis subsp.
                                                                                                                                                                                                                                                                                A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-283 <STO>
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C;Species: Pseudomonas aeruginosa
C;Date: 15-Sep-2000 #sequence_revision 15-Sep-2000 #text_change 31-Dec-2000
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A;Experimental source: strain O157:H7, substrain EDL933
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A; Residues: 1-248 <STO>
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K.; Lim,

    Mayhew Apodaca,

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C;Species: Dict
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A;Cross-references: GB:AE004506; GB:AE004091; NID:g9946584; PIDN:AAG04091.1; GSPDB:GN001: A;Experimental source: strain PAO1 C;Genetics:
                                                                A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-301 <STO>
                                                                                                                                                                                                                                      C;Accession: G83556
R;Stover, C.K.; Pham, X.Q.; Erwin, A.L.; Mizoguchi, S.D. adman, S.; Yuan, Y.; Brody, L.L.; Coulter, S.N.; Folger,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C;Keywords: ATP; phosphoprotein; phosphotransferase; F;8-257/Domain: protein kinase homology <KIN: F;16-24/Region: protein kinase ATP-binding motif F;16-24/Region: protein kinase ATP-binding motif F;39,55,129,131/Active site: Lys, Glu, Asp, Lys #stat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Biochim. Biophys. Acta 1132, 35-42, 1992
A;Title: Isolation and characterization of a cdc2 cDNA
A;Reference number: S24386; MUID:92379089; PMID:1511011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Residues: 1-288 <STO>
A;Cross-references: GB:AE005176; PID:g12723381; PIDN:AAK04597.1;
A;Experimental source: strain IL1403
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                                                                                                                                                        .; Lory, S.; Olson, M.V.
Nature 406, 959-964, 2000
A;Title: Complete genome se
A;Reference number: A82950;
                                                                                                                                                                                                                                                                                                            hypothetical protein PA0702 [imported] - Pseudomonas aeruginosa C;Species: Pseudomonas aeruginosa C;Date: 15-Sep-2000 #sequence_revision 15-Sep-2000 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Cross-references: EMBL:M80808; NID:g167685; PIDN:AAA33178.1; PID:g167686
C;Superfamily: kinase-related transforming protein; protein kinase homology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   R;Bolotin, A.; Wincker, P.; Mauger, S.; Jaillon, Genome Res. 11, 731-753, 2001
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A; Residues: 1-296 < MIC>
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;Species: Dictyostelium discoideum
;Date: 13-Jan-1995 #sequence_revision 13-Jan-1995 #text_change 18-Jun-1999
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50; MUID:20437337; PMID:10984043
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K.R.; Kas,
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A.; Larbig,
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K.; Lim,
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R;Hayashi, T.; Makino, K.; Ohnishi, M.; Kurokawa, K.; Ishii, K.; Yokoyama, K.; Fgaswara, N.; Yasunaga, T.; Kuhara, S.; Shiba, T.; Hattori, M.; Shinagawa, H. DNA Res. 8, 11-22, 2001
A;Title: Complete genome sequence of enterohemorrhagic Escherichia coli O157:H7 A;Reference number: A99829; MUID:21156231; PMID:11258796
A;Accession: B90894
A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                                            probable transport system permease protein ECs2122 [imported] - Escherichia C;Species: Escherichia coli C;Species: Escherichia coli C;Date: 18-Jul-2001 #sequence_revision 18-Jul-2001 #text_change 03-Aug-2001 C;Accession: B90894
R;Hayashi, T.; Makino, K.; Ohnishi, M.; Kurokawa, K.; Ishii, K.; Yokoyama, K
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F;116-132/Domain: transmembrane #status predicted <TM5>
F;160-176/Domain: transmembrane #status predicted <TM6>
F;160-176/Domain: transmembrane #status predicted <TM7>
F;214-230/Domain: transmembrane #status predicted <TM7>
F;263-279/Domain: transmembrane #status predicted <TM8>
F;263-279/Domain: transmembrane #status predicted <TM9>
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R;Blattner, F.R.; Plunkett III, G.; Bloch, C.A.; Perna, N.T.; Burland, V.; Riley, A.; Rose, D.J.; Mau, B.; Shao, Y.
Science 277, 1453-1462, 1997
A;Title: The complete genome sequence of Escherichia coli K-12.
A;Reference number: A64720; MUID:97426617; PMID:9278503
                                                                     A;Gene: ECs212:
C;Superfamily:
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A; Residues: 1-330 <BLAT>
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Query Match
Best Local
                                                                                                                                   Cross-references: GB:BA000007; PIDN:BAB35545.1; PID:g13361588; GSPDB:GN00154
Experimental source: strain O157:H7, substrain RIMD 0509952
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                                                                  1-arabinose transport system permease araH
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5.1%;
100.0%;
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A;Cross-references: EMBL:X68384; NID:g6659; PIDN:CAA48455.1; PID:g6660 R;Mori, H.; Palmer, R.B.; Sternberg, P.W. Mol. Gen. Genet. 245, 781-786, 1994 A;Title: The identification of a Caenorhabditis elegans homolog of p34 (cdc2) kinase. A;Reference number: S92565; MUID:95131956; PMID:7830726 A;Accession: S92565
                                                                                                                                                                                                                                                                                                                                                                                        A;Cross-references: EMBL:227079; NID:g414641; PID:g414644
R;Ferraz, C.; Thierry-Mieg, D.; le Peuch, C.J.
submitted to the EMBL Data Library, September 1992
A;Description: Complete nucleotide sequence of a cDNA coding for a p34-cdc2-like protein A;Reference number: S26572
A;Molecule type: mRNA
A;Residues: 1-175,'p',177-332 <MOR>
A;Residues: 1-175,'p',177-332 <MOR>
A;Cross-references: GB:S75262; NID:g807196; PIDN:AAC60520.1; PID:g807197
A;Note: the sequence from Fig. 2 is inconsistent with that from Fig. 1 in having 135-Leu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  protein kinase (BC 2.7.1.37) cdc2 homolog - Caenorhabditis elegans N;Alternate names: hypothetical protein T05G5.3; p34; protein kinase NCC-1 C;Species: Caenorhabditis elegans C;Date: 10-Sep-1999 #sequence revision 10-Sep-1999 #text_change 10-Sep-1999
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A;Cross-references: GB.AB005174; NID:g12515151; PIDN:AAG56251.1;
A;Cross-references: GB.AB005174; NID:g12515151; PIDN:AAG56251.1;
A:Rxmerimental source: strain O157:H7, substrain EDL933
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                                                                                                                                                                                                                                                                                                               A; Molecule type: mRNA
A; Residues: 1-332 < FER>
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A; Residues: 1-332 < THO>
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                                                                                                                                                                                                                                                                                                                                                                      A; Accession: S26572
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      submitted to the EMBL Data Library, October 1993
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In various organisms, cdc2 has been identified as a component of the M-phase ily: kinase-related transforming protein; protein kinase homology

60/3; 129/3; 181/3; 290/3

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C;Accession: AG3026
R;Wood, D.W.; Setubal, J.C.; Kaul, R.; Monks, D.;
erage, G.; Gillet, W.; Grant, C.; Guenthner, D.; K
; Karp, P.; Romero, P.; Zhang, S.
Science 294, 2317-2323, 2001
                                                                                                                                                                                                                                                                                                                                                                                                ribose ABC transporter, permease protein VCA0129 [imported] - Agrobacterium C;Species: Agrobacterium tumefaciens C;Date: 22-Oct-2001 #sequence_revision 22-Oct-2001 #text_change 18-Nov-2002
                                                                                                                                                                                        A; Molecule type: DNA
A; Residues: 1-332 < KUR>
                                                                                                                                                                                                                                                                          A;Title: Genome Sequence of the Plant Pathogen and Biotechnology Agent Agrobacterium tur
A;Reference number: A97359; MUID:21608551; PMID:11743194
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                                                                                                       A; Map position:
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A; Residues: 1-332 < KUR>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hypothetical protein rbsC [imported] - Agrobacterium tumefaciens (strain C58,
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;Date: 11-Jan-2002 #sequence_revision 11-Jan-2002 #text_change 18-Nov-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 7; ; Pred. No.
                                                                                                                                                                                                                                                                                                                                    S.; Miller, N.; Blanchard, M.; Qurollo, M.; Doughty, D.; Scott, C.; Lappas, C.;
      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 1;
5. 23;
                                             DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  D.; Chen, L.; Wood, G.E.; Chen, Y.; D.; Kutyavin, T.; Levy, R.; Li, M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Chen,
      0
                                               Length 332;
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      Indels
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Markelz, B.
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                                                                               conserved hypothetical protein TC0710 [imported] - Chlamydia muridarum (strain Nigg)
C;Species: Chlamydia muridarum, Chlamydia trachomatis MoPn
C;Date: 31-Mar-2000 #sequence_revision 31-Mar-2000 #text_change 19-May-2000
      , C.; Dodson, R.; Gwinn, M.; Nelson, W
Nucleic Acids Res. 28, 1397-1406, 2000
                                                                                                                                                                                                                                      닭
                                               R;Read,
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                                                                C;Accession: F81674
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A; Cross-references: EMBL: Z68104; PIDN: CAA92113.1; A; Cross-references: EMBL: Z68104; PIDN: CAA92113.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Experimental source: clone C; Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hypothetical protein F08B12.2 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 18-Feb-2000
                                                                                                                                                                                C;Superfamily:
                                                                                                                                                                                                 A;Gene: CT426
                                                                                                                                                                                                                                 A;Cross-references: GB:AE001316; GB:AE001273; NID:g3328850; PIDN:AAC68023.1; PID:g3328856; A;Experimental source: serotype D, strain UW-3/Cx
                                                                                                                                                                                                                                                                               A; Molecule type:
                                                                                                                                                                                                                                                                                                                 A;Title: Genome sequence of an obligate intracellular pathogen of humans: Chlamydia trace
A;Reference number: A71570; MUID:99000809; PMID:9784136
A;Accession: B71516
                                                                                                                                                                                                                                                                                                                                                                  R;Stephens, R.S.; Kalman, S.; Lammel, C.J.; Fan, J.; Marathe, Science 282, 754-759, 1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Map position: 3
A; Introns: 47/3;
RESULT 44
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                                                                                                                                                                                                                                                                                                                                                                                                   C; Accession:
                                                                                                                                                                                                                                                                                                                                                                                                                                               probable Fe-S oxidoreductase - Chlamydia trachomatis (serotype
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Gene: CESP:F08B12.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Reference number: Z19295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Status: preliminary; translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                  Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                              ;Species: Chlamydia trachomatis
;Date: 13-Sep-1998 #sequence_revision 13-Sep-1998 #text_change 08-Oct-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Accession: T20575
                                                                                                                 Matches
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                                                                                                                                              Query Match
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Best Local
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tes 7; Conserv
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                                                                                                              l Similarity
7; Conserva
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                                                  QALQLLL 38
                                                                               OALOLLL 12
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                                                                                                                Conservative
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                                                                                                                             5.1%;
                                                                                                                Score 7; DB 2; Pred. No. 25; 0; Mismatches
                                                                                                                 0
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Pred. No.
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                                                                                                                        DB 25;
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24;
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                                                                                                                                                Length 369
                                                                                                                 0,
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                                                                                                                 Indels
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T.D.; Brunham, R.C.; Shen, C.; Gill, S.R.; Heidelberg, J.F.; odson, R.; Gwinn, M.; Nelson, W.; DeBoy, R.; Kolonay, J.; McC

sequences of Chlamydia trachomatis MoPn and

Chlamydia pneumoniae AR39

McClarty,

G -

0.

Genome

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A;Experimental source: cultivar Colu
C;Genetics:
A;Map position: 4
A;Introns: 51/2; 115/3; 148/1; 216/2
A;Note: T10I14.160
                                                                                                                                                            A;Reference number: Z15389

A;Accession: T04914

A;Recele type: DNA
A;Residues: 1-386 <BEV>
A;Cross-references: EMBL:AL021712
A;Experimental source: cultivar Columbia;
                                                                                                                                                                                                                                                                                   hypothetical protein T10I14.160 - Arabidopsis thaliana (;Species: Arabidopsis thaliana (mouse-ear cress) C;Date: 23-Apr-1999 #sequence_revision 23-Apr-1999 #text_change 11-Jun-1999 C;Accession: T04914 R;Bevan, M.; Murphy, G.; Ridley, P.; Hudson, S.; Bancroft, I.; Mewes, H.W.; submitted to the Protein Sequence Database, April 1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Status: preliminary; nucleic acid sequence not shown; translation not shown A;Molecule type: DNA A;Molecule type: DNA A;Residues: 1-375 - KRMY A;Residues: 1-375 - KRMY A;Cross-references: GB:AP000001; NID:g3236128; PIDN:BAA29205.1; PID:g3256522 A;Cross-references: GB:AP000001; NID:g3236128; PIDN:BAA29205.1; PID:g3256522 A;Experimental source: strain OT3 A;Note: this accession replaces an interim accession for a sequence replaced C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R;Kawarabayasi, Y.; Sawada, M.; Horikawa, H.; Haikawa, Y.; Hino, Y.; Yamamoto, S.; Seki M.; Ohfuku, Y.; Funahashi, T.; Tanaka, T.; Kudoh, Y.; Yamazaki, J.; Kushida, N.; Oguci DNA Res. 5, 55-76, 1998
A;Title: Complete sequence and gene organization of the genome of a hyper-thermophilic A;Reference number: A71000; MUID:98344137; PMID:9679194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Molecule type: DNA
A;Residues: 1-369 <TET>
A;Crossidues: 1-369 <TET>
A;Crossidues: GB:AE002339; GB:AE002160; NID:g7190728; PIDN:AAF39523.1; PID:g719074
A;Experimental source: strain Nigg (MoPn)
C;Genetics:
A;Gene: TC0710
C;Superfamily: hypothetical protein AF0390
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A;Accession: F81674
A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
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C;Superfamily: Aquifex àeolicus Na+/H+-exchanging
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             probable Na+/H+-exchanging protein - Pyrococcus horikoshii C;Species: Pyrococcus horikoshii C;Species: Pyrococcus horikoshii C;Date: 14-Aug-1998 #sequence_revision 14-Aug-1998 #text_change 21-Jul-2000 C;Date: 14-Aug-1938 #sequence_revision 14-Aug-1998 #text_change 21-Jul-2000 C;Accession: F71234
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Best Local
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                       Query Match
Best Local :
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y Match 5.1%; So
Local Similarity 100.0%; I
hes 7; Conservative 0;
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                     Score 7; Pred. No.
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Pred. No.
  Mismatches
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, 25;
                     DB 2;
5. 26;
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). 25;
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Kudoh, Y.;
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D.; Jones, L.M.; Karet, U. Science 294, 849-852, 2001

$cience 294, 849-852, 2001

$A;Authors: Kreft, J.; Kuhn, M.; Kunst, F.; Kurapkat, G.; Madueno, ok, C.; Schlueter, T.; Simoes, N.; Tierrez, A.; Vazquez-Boland, J., Fitle: Comparative genomics of Listeria species.

A;Reference number: AB1077; MUID:21537279; PMID:11679669

A;Accession: AC1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 48
AC1163
                                                                                                                                                                   A;Molecule type: DNA
A;Residues: 1-429 <GLA>
A;Cross-references: GB:NC_003210; PIDN:CAC98785.1; PID:g16410096; GSPDB:GN00177
A;Experimental source: strain EGD-e
                                                                                                                                                                                                                                                                                                                                                                                                                              flagellar hook-associated protein 2 PliD homolog lmo0707 [imported] - Listeria monocytoge C;Species: Listeria monocytogenes C;Date: 27-Nov-2001 #sequence_revision 27-Nov-2001 #text_change 27-Nov-2001 C;Accession: AC1163 C;Accession: AC1163 R;Glaser, P.; Frangeul, L.; Buchrieser, C.; Amend, A.; Baquero, F.; Berche, P.; Bloecker, Dominguez-Bernal, G.; Duchaud, B.; Durand, L.; Dussurget, O.; Entian, K.D.; Fsihi, H.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   F;162-188/Domain: transmembrane #status predicted F;218-234/Domain: transmembrane #status predicted F;372-390/Domain: transmembrane #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Molecule type: DNA
A;Residues: 1-140,161-401 <PUG>
A;Cross-references: BMBL:M32613; NID:g149301; PIDN:AAA25128.1;
C;Superfamily: secretion protein xcps
C;Keywords: transmembrane protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Molecule type: DNA
A; Residues: 1-381 < POS>
A; Cross-references: EMBL: M32613
A; Cross-references: EMBL: M2613
R; Pugsley, A.P.; D'Enfert, C.; Reys;
submitted to the EMBL Data Library,
A; Reference number: $77951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             pulF protein - Klebsiella pneumoniae
C;Species: Klebsiella pneumoniae
C;Date: 19-Mar-1997 #sequence_revision 18-Jul-1997 #text_change 20-Aug-1999
C;Accession: S20035; S77951
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A,Reference number: S20034; MUID:92149318; PMID:1738317
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                                                                                                                                                                                                                                                            A;Status: preliminary
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Voss, H.; Wehland,
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396 ITDOYNK 402

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hypothetical protein DKFZp434F0427.1 - human
C;Species: Homo Bapiens (man)
C;Date: 04-Feb-2000 #sequence_revision 04-Feb-2000 #text_change 04-Feb-2000
C;Accession: T46443
R;Bloecker, H.; Boecher, M.; Brandt, P.; Mewes, H.W.; Gassenhuber, J.; Wiemann, submitted to the Protein Sequence Database, January 2000
A;Reference number: Z23032
A;Accession: T46443
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T46443
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A;Authors: Kreft, J.; Kuhn, M.; Kunst, F.; Kurapkat, G.; Madueno, E.; Maitournam, A.; Ma A;Authors: Kreft, J.; Kuhn, M.; Tierrez, A.; Vazquez-Boland, J.A.; Voss, H.; Wehland, ok, C.; Schlueter, T.; Simoes, N.; Tierrez, A.; Vazquez-Boland, J.A.; Voss, H.; Wehland, A;Title: Comparative genomics of Listeria species.
A;Reference number: AB1077; MUID:21537279; PMID:11679669
A;Accession: AC1522
                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                    A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-455 <AAA>
A;Cross-references: EMBL:AL137446
A;Experimental source: adult testis; clone DKFZp434F0427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-429 <GLA>
A;Cross-references: GB:AL592022; PIDN:CAC95947.1; PID:g16413167; GSPDB:GN00178
A;Experimental source: strain Clip11262
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R;Glaser, P.; Frangeul, L.; Buchrieser, C.; Amend, A.; Baquero, F.; Berche, P.; Bloecker.; Dominguez-Bernal, G.; Duchaud, E.; Durand, L.; Dussurget, O.; Entian, K.D.; Fsihi, H.D.; Jones, L.M.; Karst, U.
Search completed: January 21, 2004, 12:27:56
Job time: 23 secs
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C;Date: 27-Nov-2001 #sequence_revision 27-Nov-2001 #text_change 27-Nov-2001
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A;Gene: lin0715
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100.0%; Pred. No. 28;
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DT 
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Q9H112; Q9H113;
28-FEB-2003 (Rel. 41, Created)
28-FEB-2003 (Rel. 41, Last sequence upda
28-FEB-2003 (Rel. 41, Last annotation up
Cystatin 11 precursor.
CST11 OR CST8L.
Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata;
Mammalia; Eutheria; Primates; Catarrhini
NCBI_TaxID=9606;
[1]
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MEDLINE=21638749; PubMed=11780052;
Deloukas P., Matthews L.H., Ashurst J., Burton J., Gilbert J.G.R.,
Jones M., Stavrides G., Almeida J.P., Babbage A.K., Bagguley C.L.,
Bailey J., Barlow K.F., Bates K.N., Beard L.M., Beare D.M.,
Beasley O.P., Bird C.P., Blakey S.E., Bridgeman A.M., Brown A.J.,
Buck D., Burrill W.D., Butler A.P., Carder C., Carter N.P.,
Chapman J.C., Clamp M., Clark G., Clark L.N., Clark S.Y., Clee C.M.,
Clegg S., Cobley V.B., Collier R.B., Connor R.B., Corby N.R.,
Coulson A., Coville G.J., Deadman R., Dhami P.D., Dunn M.,
Ellington A.G., Frankland J.A., Fraser A., French L., Garner P.,
Ellington A.G., Frankland J.A., Fraser A., French L., Garner P.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DISULFID
DISULFID
CARBOHYD
VARSPLIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             the European Bioinformatics Institute. There are no restrictions where by non-profit institutions as long as its content is in modified and this statement is not removed. Usage by and for comentities requires a license agreement (See http://www.isb-sib.ch/ar or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "The DNA sequence and comparative analysis of human
                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SITE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Genew; HGNC:15959; CST11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This SWISS-PROT entry is copyright. It is produced through a obstween the Swiss Institute of Bioinformatics and the EMBL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Nature 414:865-871(2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pfam; PF0003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HSSP; P01038; 1A90.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hammond
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Note=No experimental confirmation available; SIMILARITY: BELONGS TO THE CYSTATIN FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUBCELLULAR LOCATION: Secreted ALTERNATIVE PRODUCTS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Event=Alternative splicing; Named isoforms=2;
                                                                                                                                                                                                                                                                                                                137;
121
                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AL096677; CAC13170.1; -. AL096677; CAC17423.1; -.
                                                                                                   61
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ro; IPR000010; Cystatin. PF00031; cystatin; 1. SM00043; CY; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IsoId=Q9H112-2; Sequence=VSP_001260;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IsoId=Q9H112-1;
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                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                              KYHFRIFRVLKVQRQVTDHLEYHLNVEMQWTTCQKPETTNCVPQERELHKQVNCFFSVFA 120
                                                                                                                                                                                                                                    MAEPWQALQLLIAILLTLMALPYQARKKTFLSVHEVMAVENYAKDSLQWITDQYNKESDD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PS00287;
                                                VPWFEQYKILNKSCSSD 137
                                                                                                   KYHFRIFRVLKVQRQVTDHLEYHLNVEMQWTTCQKPETTNCVPQERELHKQVNCFFSVFA
                                                                                                                                                                                                                                                                                                                                                                                                                      137
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                                                                                                                                                                                                                                                                                                                Conservative
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26
75
93
114
131
76
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     inhibitor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CYSTATIN; FALSE_NEG.
hibitor; Signal; Alternative
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101
134
131
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137
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137
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Missing (in isoform 2).
/FTId=VSP_001260.
; C585C8C39A585C3B CRC64;
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BY SIMILARITY.
BY SIMILARITY.
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                                                                                                                                                                                                                                                                                                                                     Score 137; DB 1;
Pred. No. 1.9e-133;
                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CONTACT
                                                                                                                                                                                                                                                                                                                                                             Length 137;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (POTENTIAL)
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RESULT 2 VNS2_IACKJ

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on it use by non-profit institutions as long as its content is in no will modified and this statement is not removed. Usage by and for commercial
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P08275;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pfam; PF00601; Flu NS2; 1.
Nonstructural protein; Alternative splicing.
NON_TER 1 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nakajima K., Nobusawa E., Ogav
"Genetic divergence of the NS
Virology 158:465-468(1987).
                                                                       Nakajima K., Nobusawa E., O
"Genetic divergence of the outrology 158:465-468(1987).
                                                                                                                                                                                                                    Nonstructural
                                                                                                                                                                                                                                01-AUG-1988
28-FEB-2003
                                                                                                                                                                                                                                                        01-AUG-1988
                                                                                                                                                                                                                                                                     P08273;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL; M16561; AAA43505.1; -. InterPro; IPR000968; Flu_NS2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           entities requires a license agreement (S or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-AUG-1988
28-FEB-2003
                                                                                    MEDLINE=87236215; PubMed=2954302;
Nakajima K., Nobusawa E., Ogawa T.,
"Genetic divergence of the NS genes
                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                   NCBI_TaxID=11354;
                                                                                                                                                                            Viruses; ssRNA negative-strand viruses; Orthomyxoviridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE=87236215; PubMed=2954302;
Nakajima K., Nobusawa E., Ogawa T.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=11340;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Viruses; ssRNA negative-strand viruses; Orthomyxoviridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Influenza A virus (strain A/Chicken/Japan/24)
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                                                                                                                                                                  Influenza A viruses; Influenzavirus
                                                                                                                                                                                           Influenza A virus (strain A/Duck/England/1/56).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Influenza A viruses;
                                                                                                                                                                                                                                                                                                                                                                                                              Local
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Event=Alternative spl
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                                      Name=NS2;
                                                 Event=Alternative
                                                             ALTERNATIVE PRODUCTS:
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                       IsoId=P08273-1;
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 IsoId=P08272-1;
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(Rel. 08, Last sequence update)
(Rel. 41, Last annotation update)
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(Rel. 08, Last sequence up
(Rel. 41, Last annotation
al protein NS2 (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                   protein
                                                                                                                                                                                                                                                                                  STANDARD;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   13925 MW;
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                                                                                                                                                                                                                     NS2
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 Sequence=External;
                       Sequence=Displayed,
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                                                 splicing;
                                                                                                                                                                                                                 (Fragment).
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                                                                                                                                                                                                                                                                                                                                                                                                               Score 7;
Pred. No
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genes of avian influenza viruses.";
                                                                                                                                                                                                                                                                                  PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    D6A8B4D34A163A46 CRC64;
                                                  Named isoforms=2;
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                                                                                      Nakajima
of avian
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o. 5.9;
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                                                                                       S.; influenza viruses.";
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RESULT 4
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Best Local S
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Matches 7
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P08271;
                                                                                                                                                                                                     This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE-87236215; PubMed=2954302;
Nakajima K., Nobusawa E., Ogawa T.,
"Genetic divergence of the NS genes
Virology 158:465-468(1987).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Influenza A virus (strain A/Duck/Ukraine/1/63).
Viruses; ssRNA negative-strand viruses; Orthomyxoviridae;
Influenza A viruses; Influenzavirus A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IADU3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                     riam; PF00601; Flu_NS2; 1.
Nonstructural protein; Alternative splicing
NON_TER 1
                                                                                                                                                              EMBL; M16565; AAA43513.1; -.
InterPro; IPR000968; Flu_NS2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-AUG-1988
28-FEB-2003
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Pfam; PF00601; Flu_NS2; I.
NONSTRUCTURAL protein; Alternative splicing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EMBL; M16563; AAA43511.1; -
                                                                                                           SEQÜENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nonstructural
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NON TER
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86
                                                                                                                                                                                                                                                                                                                   IsoId=P08270-1; Sequence=External;
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                                                    Similarity 7; Conserv
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QALQLLL 104
                         QALQLLL 12
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                                                                                                        118 AA; 13992 MW;
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(Rel. 41, Last ann
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                                                    Conservative
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100.0%; Pr
                                                100.08;
                                                                                                                                                              Flu_NS2.
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Last annotation updat
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b; Pred. No. 5.9
0; Mismatches
                                                   k; Score 7; DB 1
k; Pred. No. 5.9
0; Mismatches
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                                                                                                         C1A2A9D2BF665E6B CRC64;
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of avian
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 update)
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                                                                                                                                                                                                                                                                                                                                                                                                                S.;
influenza viruses.";
                                                                             Length 118;
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01-AUG-1988
01-AUG-1988
28-FEB-2003
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P08269;
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use by non-profit institutions as long as its content
modified and this statement is not removed. Usage by an
entitles requires a license agreement (See http://www.isb-
or send an email to license@isb-sib.ch).
                          SEQUENCE FROM N.A.
MEDLINE=87236215; PubMed=2954302;
Nakajima K., Nobusawa E., Ogawa T.,
"Genetic divergence of the NS genes
Virology 158:465-468(1987).
-!- ALTERNATIVE PRODUCTS:
                                                                                                                                                                                                                               Influenza A virus (strain A/Tern/South Africa/61).
Viruses; ssRNA negative-strand viruses; Orthomyxov
Influenza A viruses; Influenzavirus A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                InterPro; IPR000968; Flupfam; PF00601; Flu_NS2;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE-87236215; PubMed=2954302;
Nakajima K., Nobusawa B., Ogawa T., Nakajima
"Genetic divergence of the NS genes of avian
Virology 158:465-468(1987).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Influenza A virus (strain A/Mynah/Haneda-Thai/76).
Viruses; ssRNA negative-strand viruses; Orthomyxoviridae;
Influenza A viruses; Influenzavirus A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-AUG-1988 (Rel. 08, Created)
01-AUG-1988 (Rel. 08, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation updat
Nonstructural protein NS2 (Fragment).
                                                                                                                                                                                                       NCBI_TaxID=11476;
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                                                                                                                                                                                                                                                                                                                                       Nonstructural protein
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     Event=Alternative splicing; Named isoforms=2.
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(Rel. 08, Last sequence update)
(Rel. 41, Last annotation update)
al protein NS2 (Fragment).
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of avian
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influenza
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influenza viruses.";
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Best Local 9
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P30913;
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Interpro; IPR00096B; Flu NS2.
Pfam; PF00661; Flu NS2; I.
Nonstructural protein; Alternative splicing
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Influenza A virus (strain A/Anas acuta/Primorje/695/76).
Viruses; ssRNA negative-strand viruses; Orthomyxoviridae;
Influenza A viruses; Influenzavirus A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation -
                                                        EMBL; M60800; -; NOT ANNOTATED_CDS
InterPro; IPR000256; Flu_NS1.
InterPro; IPR000968; Flu_NS2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IAANA
SEQUENCE 121
                          Pfam; PF00600; Flu_NS1; 1.
Pfam; PF00601; Flu_NS2; 1.
                                                                                                                                                                                                                                                                                                                                   Virology 183:566-577(1991).
                                                                                                                                                                                                                                                                                                                                                               Ludwig S., Schultz U., Mandler J., "Phylogenetic relationship of the
                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A. MEDLINE=91306439; PubMed=1830182;
                                                                                                                                                                                                                                                                                                                                                                                                                                       NCBI_TaxID=11323;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nonstructural protein
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protein; Alternative splicing.
1 AA; 14370 MW; 8FBAE09AE57362BB CRC64;
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100.0%; Pred. No.
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Query Match

Score

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RESULT 8
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VNS2_IACKG
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Best Local
                                                                     01-JUL-1993
01-JUL-1993
28-FEB-2003
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use by non-profit institutions as as its content
modified and this statement is not removed. Usage by an
entities requires a license agreement (See http://www.isb-
or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Viruses; seRNA negative-strand viruses; Orthomyxoviridae; Influenza A viruses; Influenzavirus A.
                                                                                                                                                                                                                                                                                                                      EMBL; L37795; -; NOT ANNOTATED_CDS
InterPro; IPR000256; Flu_NS1.
InterPro; IPR000968; Flu_NS2.
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01-JUN-1994 (Rel. 29, Last sequence up
18-TRB-2003 (Rel. 41, Last annotation
Nonstructural protein NS2.
         Viruses; ssRNA negative-strand viruses; Orthomyxoviridae; Influenza A viruses; Influenzavirus A.
                                                                                                                                                                                                                                                                         Pfam; PF00600; Flu_NS1; \(\bar{1}\).
Pfam; PF00601; Flu_NS2; \(\bar{1}\).
Nonstructural protein; Alternative splicing.
SEQUENCE 121 AA; 14334 MW; FB6B839AE070E13A CRC64;
                                                          Nonstructural
                                                                                                                                                                                                                                                                                                                                                                                                                                 between
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NCBI_TaxID=36418;
                                 Influenza A virus (strain A/Chicken/Germany/n/49)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Name=NS1;
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7; Conserva
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(Rel. 26, Last (Rel. 41, Last (
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VNS2 IACKQ
057269;
15-JUL-1999
15-JUL-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                        This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                                                                                                                 "Comparison of avian influenza nonstructural gene sequences."; Submitted (APR-1997) to the EMBL/GenBank/DDBJ databases.
-!- ALTERNATIVE PRODUCTS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL; M55464; -; NOT ANNOTATED_CDS.
InterPro; IPR000256; Flu_NS1.
InterPro; IPR000968; Flu_NS2.
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SEQUENCE FROM N.A.

MEDLINE=91306439; PubMed=1830182;

MEDLINE=91306439; PubMed=1830182;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Viruses; ssRNA negative-strand viruses; Orthomyxoviridae; Influenza A viruses; Influenzavirus A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pfam; PF00600; Flu_NS1; 1.
Pfam; PF00601; Flu_NS2; 1.
NOnstructural protein; Alternative splicing.
SEQUENCE 121 AA; 14314 MW; COF5CE50CA8722F4 CRC64;
                                                    or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Suarez D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NCBI_TaxID=11342;
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                                                                                                                                                                                                                                                                                                        Name=NS1;
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                                                                                                                                                                                                                                                                                                                                                                                       Event=Alternative
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     U96739; AAB93937.1;
                                                                                                                                                                                                                                                                              IsoId=O57268-1; Sequence=External;
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(Rel. 41, Last ann
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RESULT 11
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STRAIN=A/Duck/Alberta/60/76;

MEDLINE=81276929; PubMed=6927848;

Baez M., Zazra J.J., Elliott R.M., Young J.F., Pal

Baez M., Zazra J.J., Elliott R.M., Young J.F., Pal

"Nucleotide sequence of the influenza A/duck/Alber

RNA: conservation of the NS1/NS2 overlapping gene

divergent influenza virus RNA segment.";

Virology 113:397-402(1981).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VNS2_IADA2 STANDARD; PRT; 121 AA. P03510; P13151; 21-JUL-1986 (Rel. 01, Created) 21-JUL-1986 (Rel. 01, Last sequence update) 15-SEP-2003 (Rel. 42, Last annotation update) Nonstructural protein NS2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   InterPro; IPR000256; Flu_NS1.
InterPro; IPR000968; Flu_NS2.
Pfam; PP00600; Flu_NS1; 1.
Pfam; PP00601; Flu_NS2; 1.
Nonstructural protein; Alternative splicing.
SEQUENCE 121 AA; 14305 MW; B560752156684892 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Influenza A virus (strain A/Duck/Alberta/60/76), Influenza A virus (strain A/Pintail/Alberta/58/79), and Influenza A virus (strain A/Pintail/Alberta/53). Viruses; ssRNA negative-strand viruses; Orthomyxoviridae; Influenza A viruses; Influenzavirus A.
                                                                                                                                                                                                                                                                                               MEDLINE=91306439; PubMed=1830182;
Ludwig S., Schultz U., Mandler J., Fitch W.M., Scholtissek C.;
"Phylogenetic relationship of the nonstructural (NS) genes of
                                                                                                                                                                                                                                                                                                                                                                                                                                      Treanor J.J., Snyder M.H., London W.T., Murphy B.R.; "The B allele of the NS gene of avian influenza viruses, but A allele, attenuates a human influenza A virus for squirrel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN=A/Pintail/Alberta/358/79;
MEDLINE=89299445; PubMed=2525836;
                                                                                                                                                                                                                                                Virology 183:566-577(1991).
                                                                                                                                                                                                                                                                                                                                                     STRAIN=A/Turkey/Canada/63;
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                                                                                                                                                                                                                                                                                                                                                                                                    Virology 171:1-9(1989).
                                                                                                                                                                                                                                                                                 influenza A viruses.";
                                                                                                                                                                                                                               Event=Alternative splicing; Named isoforms=2;
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ilarity 100.0%;
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nza A/duck/Alberta/60/76 virus
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EMBL; J02105; AAA43508.1;

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VNS2_IAFOW
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P03505;
21-JUL-1986
21-JUL-1986
28-FEB-2003
                                                                                                  EMBL; K00577; AAA43521.1; -.
EMBL; U02087; AAA67340.1; -.
InterPro; IPR000256; Flu_NS1.
InterPro; IPR000256; Flu_NS2.
Pfam; PP00600; Flu_NS1; I.
Pfam; PP00601; Flu_NS2; I.
Nonstructural protein; Alternative splicing.
Nonstructural protein; Alternative splicing.
                                                                                                                                                                                                                          This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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InterPro; IPRO000256; Flu_NS2.
InterPro; IPRO00056; Flu_NS2.
Pfam; PF00600; Flu_NS1; I.
Pfam; PF00601; Flu_NS2; 1.
Nonstructural protein; Alternative splicing.
SEQUENCE 121 AA; 14287 MW; D1143E50CA9A3FF4 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Influenza A virus (strain A/Fort Warren/1/50).
Viruses; ssRNA negative-strand viruses; Orthomyxoviridae;
Influenza A viruses; Influenzavirus A.
                                                                                                                                                                                                                                                                                                                                                                                                                                       strains.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Krystal M., Buonagurio D.A., Young J.F., Palese P.;
"Sequential mutations in the NS genes of influenza virus field
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A. MEDLINE=83164298; PubMed=6834468;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; M25370; AAA43558.1; -.
EMBL; M55468; -; NOT_ANNOTAT
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                                                  Similarity 7; Conserv
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QALQLLL 107
                         QALQLLL 12
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                                                    Conservative
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                                                 5.1%; Score 7; DB 100.0%; Pred. No. 6; ive 0; Mismatches
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RESULT 13

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RESULT 14
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DVNS2_IAGU2 STANDARD; II

AC 057278;

DT 15-JUL-1999 (Rel. 38, Created)

DT 15-JUL-1999 (Rel. 38, Last seq.

DT 28-FEB-2003 (Rel. 41, Last anno
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057266;
15-JUL-1999
15-JUL-1999
28-FEB-2003
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EMBL; U96744; AAB93948.1; -.
InterPro; IPR000266; Flu_NS1.
InterPro; IPR000968; Flu_NS2.
Pfam; PF00600; Flu_NS1; I.
Nonstructural protein; Alternative splicing.
SEQUENCE 121 AA; 14291 MW; 20B8BE84626E7640 CRC64;
                                                      "Comparison of avian Submitted (APR-1997)
                                                                                  Suarez D.L.;
                                                                                                                                        15-JUL-1999 (Rel. 38, Created)
15-JUL-1999 (Rel. 38, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Nonstructural protein NS2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                 NS OR 8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Comparison of avian influenza nonstructural gene sequences."; Submitted (JAN-1998) to the EMBL/GenBank/DDBJ databases.
                                                                                                                         NCBI_TaxID=11392;
                                                                                                                                       Influenza A viruses; Influenzavirus
                                                                                                                                                                     Influenza A virus (strain A/Gull/Minnesota/945/80)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Influenza A virus (strain A/Gull/Maryland/704/77), and Influenza A virus (strain A/Gull/Massachusetts/26/80). Viruses; ssRNA negative-strand viruses; Orthomyxoviridae; Influenza A viruses; Influenzavirus A.
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                                         ALTERNATIVE PRODUCTS
             Event=Alternative splicing; Named isoforms=2;
Name=NS2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Name=NS1;
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                                                                                                                                                                                                                                                                                                                                          101 QALQLLL 107
IsoId=057266-1; Sequence=Displayed;
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                                                                                                                                                                                                                                                                                                                                                                    6 QALQLLL 12
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                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                     STANDARD;
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                                                   influenza nonstructural gene sequences."; to the EMBL/GenBank/DDBJ databases.
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Pred. No.
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RESULT
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        Query Match
Best Local Similarity
Matches 7; Conserv
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Best Local
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P13145;
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                                                                                                                Pfam; PF00600; Flu_NS1; 1.
Pfam; PF00601; Flu_NS2; 1.
Nonstructural protein; Alternative splicing.
SEQUENCE 121 AA; 14273 MW; 210B3E58D6FCE499 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Treanor J.J., Snyder M.H., London W.T., Murphy B.R.; "The B allele of the NS gene of avian influenza viruses, bu A allele, attenuates a human influenza A virus for squirrel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Influenza A virus (strain A/Mallard/Alberta/88/76). Viruses; ssRNA negative-strand viruses; Orthomyxovi Influenza A viruses; Influenzavirus A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-JAN-1990 (Rel. 13, Created)
01-MAY-1991 (Rel. 18, Last sequence up
28-FEB-2003 (Rel. 41, Last annotation
Nonstructural protein NS2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL; U96738; AAB93936.1; -.
InterPro; IPR000968; Flu NS2.
Pfam; PF00601; Flu NS2; T.
Nonstructural protein; Alternative splicing.
SEQUENCE 121 AA; 14308 MW; 9405EC5B0CA22BF6 CRC64;
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                                                                                                                                                                                                                    InterPro; IPR000256; Flu_NS1.
InterPro; IPR000968; Flu_NS2.
                                                                                                                                                                                                                                                                                    EMBL; M25373; AAA43530.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Virology 171:1-9(1989)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      monkeys.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Name=NS2
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        s; Score 7; DB 1; Pred. No. 6; 0; Mismatches
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RESULT 17
VNS2_IAMAN
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VNS2_IAMA8
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01-JAN-1990 (Rel. 13, Created)
01-MAY-1991 (Rel. 18, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation updat
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PDB; ILCQ; I7-APR-02.

InterPro; IPR000256; Plu_NS1.

InterPro; IPR000968; Flu_NS2.

Pfam; PF00600; Plu_NS1; I.

Pfam; PF00601; Flu_NS2; I.

Nonstructural protein; Alternative splicing; 3D-structure.

SEQUENCE 121 AA; 14315 MW; D1170E63CA9A3FP4 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/
Influenza A virus (strain A/Mallard/New Viruses; ssRNA negative-strand viruses; Influenzavirus A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Virology 171:1-9(1989).
-!- ALTERNATIVE PRODUCTS:
Event_Alternative splicing; Named isoforms=2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Treanor J.J., Snyder M.H., London W.T., Murphy B.R.; "The B allele of the NS gene of avian influenza viruses, bu A allele, attenuates a human influenza A virus for squirrel
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P13144;
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Viruses; ssRNA negative-strand viruses; Orthomyxoviridae;
Influenza A viruses; Influenzavirus A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IAMA8
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P13147
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Pfam; PF00600; Flu_NS2; I.

Pfam; PF00601; Flu_NS2; I.

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Nonstructural protein; Alternative applications of the protein of the p
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Treanor J.J., Snyder M.H., London W.T., Murphy B.R.;
"The B allele of the NS gene of avian influenza viruses, but not the A allele, attenuates a human influenza A virus for squirrel
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way
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InterPro; IPR000256; Flu NS2.
Pfam; PF006600.
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(Rel. 18,
(Rel. 41,
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Best Local :
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                                                                                                                                                                                                                                                                                                                                            the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                IMBL, M25374; AAA43556.1; -.
InterPro; IPR000256; Flu NS1.
InterPro; IPR000968; Flu NS2.
Pfam; PF00600; Plu NS1; I.
Pfam; PF00600; Plu NS2; I.
Nonstructural protein; Alternative splicing, SEQUENCE 121 AA; 14347 MW; ED8D049AE568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Treanor J.J., Snyder M.H., London W.T., Worthe B allele of the NS gene of avian inf A allele, attenuates a human influenza A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL; M25375; AAA43544.1; -.
InterPro; IPR000256; Flu NS1.
InterPro; IPR000256; Flu NS2.
Pfam; PF00600; Flu NS1; I.
Pfam; PF00600; Flu NS2; 1.
Nonstructural protein; Alternative splicing.
SEQUENCE 121 AA; 14306 MW; E4D7579AE56733FF CRC64;
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NS OR 8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Virology 171:1-9(1989).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
MEDLINE=89299445; PubMed=2525836;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=11449;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Viruses; ssRNA negative-strand viruses; Orthomyxoviridae;
Influenza A viruses; Influenzavirus A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Influenza A virus (strain A/Pintail/Alberta/119/79).
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31 (Rel. 18, Last sequence up...
03 (Rel. 41, Last annotation upon the control of the con
                                                  Conservative
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                                                                         Score 7;
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influenza viruses,
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P13149;
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Pfam; PF00601; Plu NS2; 1.

Nonstructural protein; Alternative splicing.

SEQUENCE 121 AA; 14272 MW; 3EPA2PBEC4793324 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This SWISS-PROT entry is copyright. It is produced through a collaboratic between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on it use by non-profit institutions as long as its content is in no we modified and this statement is not removed. Usage by and for commercia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRAIN-A/Pintail/Alberta/121/79;
MEDLINE-89299445; PubMed=2525836;
Treanor J.J., Snyder M.H., London W.T., Murphy B.R.;
"The B allele of the NS gene of avian influenza viruses, bu A allele, attenuates a human influenza A virus for squirrel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           entities requires a license agreement (Son send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE=91306439; PubMed=1830182; Ludwig S., Schultz U., Mandler J.,
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01-JUL-1993 (Rel. 26, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Nonstructural protein NS2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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Influenza A virus (strain A/Pintail/Alberta/268/78).
Viruses; ssRNA negative-strand viruses; Orthomyxoviridae;
Influenza A viruses; Influenzavirus A.
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                                                                                                                                                                                                                                                                                                    MEDLINE-91306439; PubMed=1830182; Ludwig S., Schultz U., Mandler J.,
                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                     Influenza A virus (strain A/Turkey/Bethlehem-Glilit/1492-B/82).
Viruses; ssRNA negative-strand viruses; Orthomyxoviridae;
Influenza A viruses; Influenzavirus A.
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Pfam; PF00601; Flu_NS2; 1.

Nonstructural protein; Alternative splicing.

SEQUENCE 121 AA; 14324 MW; B96CE18BE572AD04 CRC64;
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ALTERNATIVE PRODUCTS:
                                                                                     Name=NS1
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                                                      IsoId=P30910-1;
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Nonstructural protest
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                                                                    EMBL; M16623; AAA43550.1; -.
InterPro; IPR000256; Flu NS1.
InterPro; IPR000968; Flu NS2.
Pfam; PF00600; Flu NS1; I.
Pfam; PF00600; Flu NS2; 1.
Nonetructural protein; Alternative splicing.
Nonetructural protein; Alternative splicing.
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VNS2 IA
P08277;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     InterFro; InterFro; I. NS1; I. Pfam; PF00600; Flu NS2; I. Pfam; PF00601; Flu NS2; I. Nonstructural protein; Alternative splicing. Nonstructural protein; Alternative splicing.
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InterPro; IPR000256; Flu_NS1.
InterPro; IPR000968; Flu_NS2.
                                                                                                                                                                                      entities requires a license agreement (Some or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                terminal deletions in the NS1 polypeptides. Virology 156:204-213(1987).
                                                                                                                                                                                                                                                                                                                                                                                                       "Infectious influenza
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Influenza A virus (strain A/Turkey/Oregon/71).
Viruses; ssRNA negative-strand viruses; Orthomyxoviridae;
                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE=87122162; PubMed=3811235; Norton G.P., Tanaka T., Tobita K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Influenza A viruses; Influenzavirus A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
                                                                                                                                                                                                                                                                                                            Name=NS1;
                                                                                                                                                                                                                                                                                                                                                   Event=Alternative
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                                                                                                                                                                                                                                                                                                IsoId=P08276-1;
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                         Similarity 7; Conserv
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QALQLLL
                           Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                 Krystal M., Pa
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                                     5.1%;
                                                                                                                                                                                                                                                                                              Sequence=External;
                                                                                                                                                                                                                                                                                                                         Sequence=Displayed;
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                                      Score 7;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                       B virus variants with
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                           Mismatches
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                                         ). BB 1;
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                                                    Length 121;
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MBL outstation -
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RESULT 25
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Best Local
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01-FEB-1994 (R
01-FEB-1994 (R
28-FEB-2003 (R
Cell division
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                                                                        kinase).
CDCB OR DD 01782.
Dictyostellum discoideum
Eukaryota; Mycetozoa; Dic
                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                           SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                           entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    the European Bioinformatics Institute. There are no restrictions on use by non-profit institutions as long as its content is in no modified and this statement is not removed. Usage by and for commer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   beta-1,6-glucan synthesis.";
J. Bacteriol. 180:5020-5029(1998).
-!- FUNCTION: INVOLVED IN CELL WAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nagahashi S., Lussier M., Bussey H.; "Isolation of Candida glabrata homologs of the Saccharomyces cerevisiae KRE9 and KNH1 genes and their involvement in cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Candida glabrata (Yeast) (Torulopsis glabrata).
Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;
Saccharomycetales; mitosporic Saccharomycetales; Candida.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CANGA
         MEDLINE=92379089; PubMed=1511011; Michaelis C., Weeks G.;
                                                                                                                                                                                                                                                                                                                                                                                                      Glycoprotein; Cell wall; Signal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRAIN=ATCC 2001;
MEDLINE=98422452; PubMed=9748432;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KRE9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15-JUL-1999 (Rel. 38, Created)
15-JUL-1999 (Rel. 38, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Cell wall synthesis protein KRE9 precursor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     074683;
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                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL; AF064251; AAC64008.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -!- PTM: O-GLYCOSYLATED (BY SIMILARITY).
-!- SIMILARITY; BELONGS TO THE KRE9 / KNH1 FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -!- SUBCELLULAR LOCATION: SECRETED,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NCBI_TaxID=5478;
"Isolation and characterization of a
                                                                                                                                                                                             DICDI
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276 AA;
                                                                                                                          (Rel. 28, Created)
(Rel. 28, Last sequence update)
(Rel. 41, Last annotation update)
on control protein 2 homolog (EC 2
                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STANDARD;
                                                                                                                                                                                             STANDARD;
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                                                                                                                                                                                                                                                                                                                                                                30549 MW;
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                                                                          pum (Slime mold).
Dictyosteliida;
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                                                                                                                                                                                                                                                                                                                            Score 7;
Pred. No
                                                                                                                                                                                                                                                                                                                                                                            POTENTIAL.
CELL WALL SYNTHESIS PROTEIN KRE9
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PROBABLY FO
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cDNA from Dictyostelium
                                                                                                                            2.7.1.-) (p34 protein
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OUND AT CELL SURF
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RESULT 26
YDEZ_ECOLJ
ID YDEZ
AC P7765
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DT 15-JU
DT 28-FE
DE Hypot
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Best Local S
Matches 7
             Z_BCOLI
YDEZ_ECOLI
P77651; P76881;
15-JUL-1998 (Rel
15-JUL-1998 (Rel
28-FEB-2003 (Rel
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MOD_RES
SEQUENCE
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BINDING
ACT_SITE
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ProDom; PD000001; Prot_kinase; 1.

SMART; SM00220; S TKC; 1.

SROSITE; PS00100; PROTEIN_KINASE_ATP; 1.

PROSITE; PS00108; PROTEIN_KINASE_DOM; 1.

PROSITE; PS50011; PROTEIN_KINASE_DOM; 1.

PROSITE; PS50011; PROTEIN_KINASE_DOM; 1.

PROSITE; PS50011; PROTEIN_KINASE_DOM; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL; M80808; AAA33178.1; -.
EMBL; AC117076; AAM33721.1; -.
PIR; S24386; S24386.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Sequence and analysis of chromosome 2 of Dictyostelium.";
Submitted (MAR-2002) to the EMBL/GenBank/DBJ databases.
-!- FUNCTION: PLAYS A KEY ROLE IN THE CONTROL OF THE EUKARYOTIC CELL CYCLE. IT IS REQUIRED IN HIGHER CELLS FOR ENTRY INTO S-PHASE AND MITOSIS. P34 IS A COMPONENT OF THE KINASE COMPLEX THAT PHOSPHORYLATES THE REPETITIVE CARBOXYL-TERMINUS OF RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  discoideum.";
Biochim. Biophys.
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Tunggal B., Cox E., (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRAIN=AX4;
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InterPro; IPR002290; Ser_thr_pkinase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DictyDb; DD05040; cdcB.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                          MOD_RES
                                                                                                                                                                                                                                                                                                                                                                     DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SUBUNIT: FORMS A STABLE BUT NON-COVALENT COMPLEX WITH A REGUI SUBUNIT AND WITH A CYCLIN.
SIMILARITY: BELONGS TO THE SER/THR FAMILY OF PROTEIN KINASES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             POLYMERASE II.
ENZYME REGULATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ENZYME REGULATION: PHOSPHORYLATION AT THR-20 OR TYR-21 THE ENZYME, WHILE PHOSPHORYLATION AT THR-162 ACTIVATES
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                                                                                                                                                 215
                                                                                                                                                                      64 FRIFRVL
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(Rel. 36, Last sequence update)
(Rel. 41, Last annotation update)
ABC transporter permease protein
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129
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aumgart C., Parra G., April J.F., Guigo R.,
ox E., Quail M.A., Platzer M., Rosenthal A.,
                                                                        STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                 division;
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ATP (BY SIMILARITY).
BY SIMILARITY.
PHOSPHORYLATION (BY S
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Pred. No.
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(BY SIMILARITY).
(BY CAK) (BY SIM
   ydeZ.
                                                                                                                                                                                                         0; Indels
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Sun L., Xu
Cheng H.,
                InterPro; IPR00185; Bac inmem transp.
InterPro; IPR00185; BBC transp.
Pfam; PF02653; BPD transp_2; 1.
PROSITE; PS00402; BPD transp_2; INM MEMBE; FALSE NEG.
Hypothetical protein; Transport; Transmembrane; Incomplete proteome.
TRANSMEM 5 25 POTENTIAL.
TRANSMEM 43 63 POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SPECIES=E.coli; STRAIN=K12;
MEDLINE=97251357; PubMed=9097039;
Alba H., Baba T., Fujita K., Hayashi K., Inada T., Isono K.
Alba H., Baba T., Fujita K., Hayashi K., Kitakawa M.,
Itoh T., Kasai H., Kashimoto K., Kimura S., Kitakawa M.,
Kitagawa M., Makino K., Miki T., Mizobuchi K., Mori H., Nishio O.
Motomura K., Nakade S., Makamura Y., Nashimoto H., Nishio O.
Oshima T., Saito N., Sampei G., Seki Y., Sivasundaram S.,
Tagami H., Takeda J., Takemoto K., Takeuchi Y., Wada C.,
Yamamoto Y., Horiuchi T.;
Yamamoto Y., Horiuchi T.;
Tayani H., Takeda J., Takemoto K., Takeuchi X., Wada C.,
Yamamoto Y., Horiuchi T.;
                                                                                                                                                                                                                                EMBL; AE000249; AAC74588.1; -.
EMBL; D90794; BAA15202.1; -.
EMBL; D90795; BAA15203.1; -.
                                                                                                                                                                                                                                                                                                              the European Bioinformatics Institute. There are no rest
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modified and this statement is not removed. Usage by ar
entitles requires a license agreement (See http://www.isb-
or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "Genome sequence of Shigella flexmeri 2a: insights into pathogenicity through comparison with genomes of Escherichia coli K12 and O157."; Nucleic Acids Res. 30:4432-4441(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE=22272406; PubMed=12384590;
Jin Q., Yuan Z., Xu J., Wang Y., Shen Y., Lu W., Wang V.
Yang J., Yang F., Zhang X., Zhang J., Yang G., Wu H., Q
Sun L., Xue Y., Zhao A., Gao Y., Zhu J., Kan B., Ding F
Cheng H., Yao Z., He B., Chen R., Ma D., Qiang B., Wen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE=97426617; PubMed=9278503;
Blattner F.R., Plunkett G. III, Bloch C.A., Perna N.T., Burla
Riley M., Collado-Vides J., Glasner J.D., Rode C.K., Mayhew G
Gregor J., Davis N.W., Kirkpatrick H.A., Goeden M.A., Rose D.
Mau B., Shao Y.;
                                                                                                                                                                          PIR; F64905; F64905.
EcoGene; EG13808; ydeZ.
                                                                                                                                                                                                                                                                                                                                                                                                           This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation -
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SPECIES=E.coli; STRAIN=K12 / MG1655;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     YDEZ OR B1515 OR SF1584.1.
Escherichia coli, and
                                                                                                                                                                                                                EMBL; AE015180; AAN43172.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA Res. 3:363-377(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "The complete genome sequence Science 277:1453-1474(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Enterobacteriaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SYSTEM EGO; YDEYZ. PROBABLY RESPONSIBLE THE SUBSTRATE ACROSS THE MEMBRANE. SUBCELLULAR LOCATION: Integral membrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FUNCTION: PROBABLY PART OF A BINDING-PROTEIN-DEPENDENT TRANSPORT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SIMILARITY: BELONGS TO THE BINDING-PROTEIN-DEPENDENT TRANSPORT SYSTEM PERMEASE FAMILY. ARAH/RBSC SUBFAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (Potential).
proteome. 5 1 43 . 68
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Escherichia.
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                                                                               Transport; Transmembrane; Inner membrane;
  POTENTIAL.
POTENTIAL.
POTENTIAL.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        / Serotype
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  membrane protein. Inner membrane
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Inada T., Isono K.,
S., Kitakawa M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2a;
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y K., Chen
n Y., Hou
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yhew G.F.,
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Matches 7
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MEDLINE-94150718; PubMed=7906398;
Wilson R., Ainscough R., Anderson K., Baynes C., Berks M.,
Bonfield J., Burton J., Connell M., Copsey T., Cooper J., Coulson A.
Craxton M., Dear S., Du Z., Durbin R., Favello A., Fraser A.,
Fulton L., Gardner A., Green P., Hawkins T., Hillier L., Jier M.,
Johnston L., Jones M., Kershaw J., Kirsten J., Laisster N.,
Latreille P., Lightning J., Lloyd C., Mortimore B., O'Callaghan M.,
Parsons J., Percy C., Rikken L., Roopra A., Saunders D., Shownkeen I
Sims M., Smaldon N., Smith A., Smith M., Sonnhammer B., Staden R.,
Sulston J., Thierry-Mieg J., Thomas K., Vaudin M., Vaughan K.,
Waterston R., Watson A., Weinstock L., Wilkinson-Sproat J.,
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28-FEB-2003
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P34556;
                                             Boxem M., Srinivasan D.G., van den Heuvel "The Caenorhabditis elegans gene ncc-1 encrequired for M phase in meiotic and mitotic
                                                                                                                                                                                 SEQUENCE FROM N.A. MEDLINE=95131956;
                                                                                   STRAIN=Bristol N2;
MEDLINE=99225469; PubMed=10207147;
                                                                                                                                                           Mori H., Palmer R.E., Sternberg P.W.; "The identification of a Caenorhabditis
                                                                                                                                                                                                                        Submitted
                                                                                                                                                                                                                                 STRAIN=Bristol N2;
Ferraz C., Thierry
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Rhabditidae; Peloderinae;
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for S phase.";
Development 126:2227-2239(1999)
-!- FUNCTION: PLAYS A KEY ROLE
-CELL CYCLE. IT IS REQUIRED
                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=6239;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Cell division
                                                                                                                                                                                                                                                                                Nature 368:32-38(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Caenorhabditis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              kinase)
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                                                                                                                                   245:781-786(1994).
                                                                                                                                                                                  PubMed=7830726;
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136
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Last annotation update)
protein 2 homolog (EC 2
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                                                gans gene ncc-1 encodes a cdc2-related kinase meiotic and mitotic cell divisions, but not
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0; Mismatches
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                                                                                                                                                                                                                     le Peuch C.J.;
EMBL/GenBank/DDBJ databases
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THE CONTROL OF THE EUKARYOTIC HIGHER CELLS FOR ENTRY INTO S-PHASE
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15-DEC-1998
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ProDom; PD000001; Prot kinase; 1.

SMART; SM00220; S TKc; 1.

PROSITE; PS00107; PROTEIN_KINASE_ATP; 1.

PROSITE; PS00108; PROTEIN_KINASE_ST; 1.

PROSITE; PS00018; PROTEIN_KINASE_DM; 1.

PROSITE; PS00011; PROTEIN_KINASE_DM; 1.

PROSITE; PS00011; PROTEIN_KINASE_DM; 1.
Submitted (NOV-1995) to the EMBL/GenBank/DDBJ databases.-!- FUNCTION: Required for protein import into peroxison similarity).
                                                       SEQUENCE FROM N.A.
STRAIN=Bristol N2;
                                                                                                 NCBI
                                                                                                           Caenorhabditis elegans.
Eukaryota; Metazoa; Nematoda; Chromadorea; Rhabditida;
Rhabditidae; Peloderinae; Caenorhabditis.
                                                                                                                                                     Putative peroxisome F08B12.2.
                                                                                                                                                                              15-DEC-1998
16-OCT-2001
                                                                                                                                                                                                                                    PEXC
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EMBL; X68384; CAA48455.1; -.
EMBL; S75262; AAC60520.1; -.
EMBL; AF129109; AAD37119.1; -.
                                        Dobson R.;
                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation -
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InterPro; IPR000719; Prot
InterPro; IPR002290; Ser_t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PIR; S41003; S41003.
HSSP; P24941; 1CKP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    entities requires a license agreement
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AND MITOSIS. P34 IS A COMPONENT OF THE KINASE COMPLEX THAT PHOSPHORYLATES THE REPETITIVE CARBOXYL-TERMINUS OF RNA POLYMERASE II (BY SIMILARITY).

ENZYME REGULATION: PHOSPHORYLATION INACTIVATES THE ENZYME (BY SIMILARITY).

SUBUNIT: FORMS A STABLE BUT NON-COVALENT COMPLEX WITH A REGULATORY SUBUNIT AND WITH A CYCLIN.

SIMILARITY: BELONGS TO THE SER/THR FAMILY OF PROTEIN KINASES.

CDC2/CDKX SUBFAMILY.
                                                                                                 TaxID=6239;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cycle; Cell
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                                                                                                                                                                                                                                                                                                                                                                                                                332
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(Rel. 37, Last sequence up
(Rel. 40, Last annotation
roxisome assembly protein 1
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28
51
146
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176
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2 312 PROTEIN KINASE.
8 36 ATP (BY SIMILARITY).
11 51 ATP (BY SIMILARITY).
16 146 BY SIMILARITY).
16 146 BY SIMILARITY (BY SIMILARITY).
17 32 PHOSPHORYLATION (BY SIMILARITY).
18 33 PHOSPHORYLATION (BY SIMILARITY).
19 34 PHOSPHORYLATION (BY SIMILARITY).
19 35 PHOSPHORYLATION (BY SIMILARITY).
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Mismatches
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12 (Peroxin-12).
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              peroxisomes
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048014;
16-OCT-2001
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                        entities
or send a
                                                                                             This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way
                                                                                                                                                                                                                                                                                                                                                    Thesis (1997), Queen's University / Kingston, Canada.
-!- FUNCTION: Component of the ubiquinol-cytochrome c reductase complex (complex III or cytochrome b-c1 complex), which is a respiratory chain that generates an electrochemical potential coupled to ATP synthesis (By similarity).
-!- COPACTOR: Binds two heme groups non-covalently. Heme 1 (or BL b562) is low-potential and absorbs at about 562, and heme 2 (coupled to ATP synthesis (By similarity).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Lepidosauria; Squamata; Scleroglossa; Serpentes; Henophidia; Aniliidae; Anilius.
ANILITAXID=51844;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           InterPro; IPR006845; Pex2 Pex12.
InterPro; IPR001841; Znf ring.
Pfam; PF04757; Pex2 Pex12; 1.
SMART; SM00184; RING; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               the European Bioinformatics Institute. There are no rest
use by non-profit institutions as long as its content
modified and this statement is not removed. Usage by ar
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TRANSMEM :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mitochondrion
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WormPep; F08B12.2; CE03163.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (Serpentes: Booidea).";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Hic Sunt Serpentes -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15-SEP-2003
                                                                                                                                                                                                                        SUBUNIT: The main subunits of complex b-c1 are: cytochrome cytochrome c1 and the Rieske protein (By similarity). SIMILARITY: Belongs to the cytochrome b family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (Potential).
SIMILARITY: BELONGS TO THE PEROXIN 12 FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SUBCELLULAR LOCATION: Integral membrane protein. Peroxisomal
                                                                                                                                                                                                                                                                                                         similarity)
                                                                                                                                                                                                                                                                                                                              or b566) is high-potential and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      T20575; T20575.
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7; Conserv
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an email to license@isb-sib.ch).
                                                                     non-profit institutions as long and this statement is not removed.
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Pred. No. 15;
0; Mismatches
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SEQUENCE
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P15745;
                                                                                                                                                                                                                                                                                                                                                                             the European Bioinformatics Institute. There are no rest
use by non-profit institutions as long as its content
modified and this statement is not removed. Usage by ar
entitles requires a license agreement (See http://www.isb-
or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pugsley A.P., D'Enfert C., Reyss I., Wandersman C.,
Submitted (WAR-1990) to the EMBL/GENER/DBJ databases.
-I-FUNCTION: INVOLVED IN A GENERAL SECRETION PATHWAY (GSP) FOR THE
EXPORT OF PROTEINS. REQUIRED FOR THE TRANSLOCATION OF PULLULANASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-APR-1990 (Rel. 14, Created)
01-APR 1990 (Rel. 14, Last sequence update)
01-NOV-1995 (Rel. 32, Last annotation update)
General secretion pathway protein P (Pullulanase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Heme.
METAL
                                                                                                              TRANSMEM TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales; Enterobacteriaceae; Klebsiella.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KLEPN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             InterPro; IPR005798; Cytb_b6_C.
InterPro; IPR005797; Cytb_b6_N.
Pfam; PF00032; cytochrome_b_C; 1.
Pfam; PF00033; cytochrome_b_N; 1.
PROSITE; PS00193; CYTOCHROME_B_HEME;
PROSITE; PS00192; CYTOCHROME_B_HEME;
                                                                                                                                                                                                                                                                  PIR; S20035; S20035.
InterPro; IPR003004;
InterPro; IPR001992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
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                                                                                                                                                          Transport;
                                                                                                                                                                                                    PROSITE; PS00874; T2SP_F;
                                                                                                                                                                                                                                                                                                                                   EMBL; M32613; AAA25128.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NCBI_TaxID=573;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Klebsiella pneumoniae.
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                                                                                                                                                                                                                           PRINTS;
                                                                                                                                                                                                                                              Pfam; PF00482; GSPII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SIMILARITY: BELONGS TO THE PULF/OUTF/EXEF/XPSF/XCPS FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUBCELLULAR LOCATION: Integral membrane protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KLEPN
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7; Conserve
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Conservative
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Pred. No.
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                                                                                            01347C0994B29933 CRC64;
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                           DB 1;
o. 16;
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                                              Length 381;
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EMBL; L38423; AAB00846.1; -.
EMBL; U30798; AAA81334.1; -.
HSSP; O14763; IDOG.
HSSP; O14763; IDOG.
InterPro; IPRO01368; TNFR C6.
Pfam; PF00200; TNFR C6; 3.
SMART; SM00208; TNFR; 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TNR3 MOUSE
P50284;
01-OCT-1996
                                                                                                                                                                                          This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                    J. Biol. Chem. 271:14661-14664 (1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-OCT-1996 (Rel. 34, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
Tumor necrosis factor receptor superfamily member 3 precursor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Nakano
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRAIN=BALB/c;
MEDLINE=96278943; PubMed=8663299;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gequence trap and chromos
Genomics 30:312-319(1995)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRAIN=CVB: TISSUE=Lung;
MEDLINE=96072804; PubMed=7594541;
Force W.R., Walter B.N., Hession |
Browning J.L., Ware C.F.;
PROSITE; PS00652; TNFR NGFR 1; 2. PROSITE; PS50050; TNFR NGFR 2; 3. Receptor; Apoptosis; Transmembrane;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nakamura T., Tashiro K.,
Honjo T.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (Lymphotoxin-beta receptor).
LTBR OR TNFRSF3 OR TNFCR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "TRAF5, an activator of NF-kappaB and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "The murine lymphotoxin-beta receptor cDNA: isolation by the signal sequence trap and chromosomal mapping.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE=96163885; PubMed=8586432;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Mouse lymphotoxin-beta receptor. and expression.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                     FUNCTION: Receptor for the heterotrimeric lymphotoxin containing LTA and LTB, and for TNFS14/LIGHT. Promotes apoptosis via TRAF3 and TRAF5, May play a role in the development of lymphoid organs (By similarity).

SUBUNIT: Self-associates (By similarity). Associates with TRAF5. Associates with TRAF3 and TRAF4 (By similarity). SUBCELLULAR LOCATION: Type I membrane protein.

SIMILARITY: Contains 4 TNPR-Cys repeats.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Immunol. 155:5280-5288(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Oshima H., Chung W., Okumura K.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (Rel. 34,
(Rel. 34,
(Rel. 42,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WITH TRAFS.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nazarea M., Nakano
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Williams-Abbott L.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Molecular
 Glycoprotein; Repeat; Signal.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Kozak C.A.,
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RESULT
TBB1_SC
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Best Local S
Matches
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01-OCT-1989
01-OCT-1989
15-JUL-1999
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DOMAIN
EMBL; M21296; AAA34009.1; -.
InterPro; IPR002453; Beta tubulin
InterPro; IPR002017; Tubulin.
InterPro; IPR003008; Tubulin_FtsZ
Pfam; PF00091; tubulin; 1.
                                                                                 This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial
                                                                                                                                               -!- FUNCTION: TUBULIN IS THE MAJOR CONSTITUENT OF MICROTUBULES.
BINDS TWO MOLES OF GTP, ONE AT AN EXCHANGEABLE SITE ON THE
CHAIN AND ONE AT A NONEXCHANGEABLE SITE ON THE ALPHA-CHAIN
-!- SUBUNIT: Dimer of alpha and beta chains.
-!- SIMILARITY: BELONGS TO THE TUBULIN FAMILY.
                                                                                                                                                                                                                                     Guiltinan M.J., Ma D.-P.,
Yadegari R., Fosket D.E.;
                                                                                                                                                                                                                                                                                         Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Rosida eurosids I; Fabales; Fabaceae; Papilionoideae; Phaseoleae; Glycine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CHAIN
                                                               entities requires a license agreement (S or send an email to license@isb-sib.ch).
                                                                                                                                                                                                      beta-tubulin genes from soybean (Glycine Plant Mol. Biol. 10:171-184(1987).
                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                             Tubulin beta-1 chain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SIGNAL
                                                                                                                                                                                                                                                                              NCBI_TaxID=3847;
                                                                                                                                                                                                                                                                                                                         Glycine max (Soybean).
                                                                                                                                                                                                                                                                                                                                      TUBBI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DISULFID
                                                                                                                                                                                                                            "The isolation, characterization and sequence of two divergent
                                                                                                                                                                                                                                                                                                                                                                                                   SOYBN
                                                                                                                                                                                                                                                                                                                                                                                                                                                       222
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(Rel.
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12, Last seq
38, Last ann
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                                                                                                                                                                                                                                                Barker R.F.,
                                                                                                                                                                                                                                                                                                                                                        sequence up
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BY SIMILARITY.
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Pred. No.
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TNFR-CYS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TNFR-CYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CYTOPLASMIC
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                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29B326A566AEF661 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                    445
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17;
                                                                         noved. Usage by and for commercial
(See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                 Bustos
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BETA
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   RESULT 33
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Best Local (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pfam; PF03953; tubulin C; 1.
PRINTS; PR01161; TUBULIN:
PROSITE; PS00227; TUBULIN; 1.
PROSITE; PS00228; TUBULIN B AUTOREG; 1.
Microtubules; GTP-binding; Multigene family.
NP BIND 140 GTP (POTENTIAL)
SEQUENCE 445 AA; 49991 MW; E68E24260D9AR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE=97450962; PubMed=9305895; Salinas M., Duprat F., Heurteaux C., Hugnot J "New modulatory alpha subunits for mammalian J. Biol. Chem. 272:24371-24379(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28-FEB-2003 (Rel. 41, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
Potassium voltage-gated channel subfamily S member
channel Kv9.1) (Delayed-rectifier K+ channel alpha
                                                                                                                                                                                                                                    use
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                                                                                                                                                                                      entities requires a license agreement (S or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                           +
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28-FEB-2003
28-FEB-2003
                                                                           InterPro;
InterPro;
                                                                                                                                                                                                                                                                 between
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -!- SUBUNIT: Heteromultimer with KCNB1 and with KCNB2. Does not form
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TISSUE=Brain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mus musculus (Mouse)
                                                                                                                            MGD; MGI:1197019;
                                                                                                             InterPro;
                                                InterPro;
                                                                nterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Biol. Chem. 272:24371-24379(1997).

- FUNCTION: Potassium channel subunit. Modulates and reduces the ion flow.
                                                                                                                                                                                                                 s SWISS-PROT entry is copyright. It is produced through ween the Swiss Institute of Bioinformatics and the E Buropean Bioinformatics Institute. There are no rest by non-profit institutions as long as its content if the statement is not removed. Usage by an ified and this statement is not removed.
                                                                                                                                                                                                                                                                                                             tissues tested. The highest levels of expression are in olfactory bulb, cerebral cortex, hippocampus, habenula, basolateral amygdaloid nuclei and cerebellum.

DOMAIN: The segment S4 is probably the voltage-sensor and is characterized by a series of positively charged amino acids at every third position.

SIMILARITY: BELONGS TO THE POTASSIUM CHANNEL FAMILY. S SUBFAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    homomultimers. Might also bind to other channel proteins. SUBCELLULAR LOCATION: Integral membrane protein. May not reach the plasma membrane but remain in an intracellular compartment in the
                                                                                                                                                                                                                                                                                                                                                                                                                         absence of KCNB1.
TISSUE SPECIFICITY: Detected in brain,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      116 FSVFAVP 122
                                                                                                                                         AF008573;
Q54397; 1E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                167 FSVFAVP 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity 7; Conserv
                ; IPR005821; Ion_trans.
; IPR001622; K+channel.
; IPR003091; K_channel.
; IPR003131; K_tetra.
; IPR003971; Kv9_channel.
; IPR003968; Kv_channel.
                                                                                                          IPRO00210; BTB_POZ.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (Rel. 41, Created)
                                                                                                                                            1BL8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STANDARD;
                                                                                                                                                          AAB72050.1;
                                                                                                                            Kcn81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AND FUNCTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5.1%;
M+channel_nlg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 7; DB 1; Pred. No. 18; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           <u>.</u>
                                                                                                                                                                                                      is not removed. Usage by and for commercial agreement (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
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                                                                              pore.
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                                                                                                                                                                                                                                                                              It is produced through a collaboration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hugnot J.-P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    497
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5. 18;
                                                                                                                                                                                                                                                                                                                                                                                                                           but not in the other
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 445;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     channel activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Lazdunski M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          subunit 1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 (Potassium
                                                                                                                                                                                                                                                                 the EMBL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                channels.";
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RESULT
KCS1_RA
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Best Local
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088758;
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DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pfam; PF02214; K_tetra; 1.
PRINTS; PR00119; KCHANNEL.
PRINTS; PR01494; KV9CHANNEL.
PRINTS; PR01491; KVCHANNEL.
SMART; SM00225; BTB; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pfam;
Pfam;
                                                                                                                                                                                                                                                                                                                                                      28-FEB-2003 (Rel. 41, Created)
28-FEB-2003 (Rel. 41, Last sequence update)
28-FEB-2003 (Rel. 41, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Potassium voltage-gated channel subfamily S member Channel Kv9.1) (Delayed-rectifier K+ channel alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DOMAIN
DOMAIN
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TRANSMEM
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TRANSMEM
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Transport; Ion transport; Ionic
                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                   Rattus norvegicus (Rat).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Potassium
                                                                                       +
                                                                                                                                                                                                                                           Stocker M.,
                                                                                                                                                                                                                                                      MEDLINE=98369652; PubMed=9704029;
                                                                                                                                                                                                                                                                  TISSUE=Brain;
                                                                                                                                                                                                                                                                                                 NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                               KCNS1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TRANSMEM
                     between
                               This SWISS-PROT entry is copyright. It is produced through a collaboration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DOMAIN
                                                                                                                                                                                                                                  Stocker M., Kerschensteiner D.; 
"Cloning and tissue distribution of two new potassium
                                                    other tissues tested.

DOMAIN: The segment S4 is probably the voltage-sensor and is characterized by a series of positively charged amino acids a every third position.

SIMILARITY: BELONGS TO THE POTASSIUM CHANNEL FAMILY. S SUBFAL
                                                                                                        similarity).
SUBCELLULAR LOCATION: Integral membrane protein.
plasma membrane but remain in an intracellular cc
absence of KCNB1 (By similarity).
TISSUE SPECIFICITY: Highly expressed in brain, bu
Ween the SWIBB INCLUSION INSTITUTE. The European Bioinformatics Institute. The European Bioinformatics as long
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PF00520;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity 7; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RIFRVLK 326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RIFRVLK 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           channel; Potassium;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ion_trans; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                         STANDARD;
                      Institute
                                                                                                                                                                                                                                                                                                             Chordata;
Rodentia;
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SEGMENT S4 (POTENTIAL).
CYTOPLASMIC (POTENTIAL).
SEGMENT S5 (POTENTIAL).
SEGMENT H5 (POTENTIAL).
SEGMENT S6 (POTENTIAL).
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SEGMENT S2
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Mismatches
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                    Bioinformatics and the
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InterPro; IPR005221; I-on trans.
InterPro; IPR005221; I-on trans.
InterPro; IPR003091; K_channel.
InterPro; IPR003191; K_tetra.
InterPro; IPR003191; K_vg_channel.
InterPro; IPR003971; Kvg_channel.
InterPro; IPR003968; Kv_channel.
InterPro; IPR005820; M+channel_nlg.
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Pfam; PF02214; K tetra; 1.
PRINTS; PR0169; KCHANNEL.
PRINTS; PR01494; KV9CHANNEL.
PRINTS; PR01491; KVCHANNEL.
SMART; SM00225; BTB; 1.
                                                                   SEQUENCE FROM N.A.
TISSUB-Brain, and Lens epithelium;
TISSUB-Brain, and Lens epithelium;
MEDLINE=99413882; PubMed=10484328;
Shepard A.R., Rae J.L.;
"Electrically silent potassium channel
                                                                                                                                                                                  KCS1 HUMAN STANDARD; PRT; 526 AA. 096KK3; 043652; 28-FEB-2003 (Rel. 41, Created) 28-FEB-2003 (Rel. 41, Last sequence update) 28-FEB-2003 (Rel. 41, Last annotation update) Potassium voltage-gated channel subfamily S muchannel Kv9.1) (Delayed-rectifier K+ channel)
SEQUENCE FROM N.A.
MEDLINE=21638749; PubMed
Deloukas P., Matthews L
Jones M., Stavrides G.,
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DOMAIN
DOMAIN
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Mammalia; Eutheria;
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                 PubMed=11780052;
                                                                                                                                          Chordata; (Primates;
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 1.H., Ashu
3., Almeida
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ium; Potassium transport; Transmembrane;
Ashurst J., Burton J., (
eida J.P., Babbage A.K.,
                                                                                                                                                                                                                                                                                                                                           Score 7; DB 1
Pred. No. 20;
0; Mismatches
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SEGMENT S4 ()
CYTOPLASMIC
SEGMENT S5 ()
SEGMENT H5 ()
SEGMENT S6 ()
CYTOPLASMIC
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SEGMENT S2 (
CYTOPLASMIC
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                                                                                                                                                                                     amily S member 1 (Potassium channel alpha subunit 1).
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RA Bailey J., Barlow K.F., Bates K.N., Beard L.M., Beare D.M.,
RA Beasley O.P., Bird C.P., Blakey S.E., Bridgeman A.M., Brown A.J.,
RA Beasley O.P., Burici R.P., Blakey S.E., Bridgeman A.M., Brown A.J.,
RA Chapman J.C., Clamp M., Clark G., Clark L.N., Clark S.Y., Clee C.M.,
RA Chapman J.C., Clamp M., Clark G., Clark L.N., Clark S.Y., Clee C.M.,
RA Chapman J.C., Clamp M., Clark G., Clark L.N., Clark S.Y., Clee C.M.,
RA Coulson A., Coville G.J., Deadman R., Dhami P., Dunn M.,
RA Coulson A.G., Frankland J.A., Fraser A., French L., Garner P.,
RA Grafham D.V., Griffiths C., Griffiths M.N.D., Gwilliam R., Hall R.E.,
RA Grafham D.V., Griffiths C., Griffiths M.N.D., Gwilliam R., Hall R.E.,
RA Grafham D.V., Griffiths C., Griffiths A., Laird G.K., Lawlor S.,
RA Hammond S., Harley J.L., Heath P.D., Ho S., Holden J.L., Howden P.J.,
RA Hammond S., Harley J.L., Heath P.D., Ho S., Holden J.L., Howden P.J.,
RA Kay M.P., Kimberley A.M., King A., Knights A., Laird G.K., Lawlor S.,
RA Kay M.P., Kimberley A.M., King A., Knights A., Laird G.K., Lawlor S.,
RA Kay M.P., Kimberley A.M., King A., Knights A., Laird G.K., Lawlor S.,
RA Milne S., Mistry D., Moore M.J.F., Mullikin J.C., Nickerson T.,
RA Milne S., Mistry D., Moore M.J.F., Mullikin J.C., Nickerson T.,
RA Rice C.M., Ross M.T., Scott C.E., Sehra H.K., Shownkeen R., Sims S.,
RA Kuce C.D., Smith M.L., Soderlund C., Steward C.A., Sulston J.E.,
RA Swann M., Sycamore N., Taylor R., Tee L., Thomas D.W., Thorpe A.,
RA Wilming L., Wall R., Mallis J.M.,
Williams S.A.,
Whitehead S.L., Whittaker P., Willey D.L., Williams L., Williams S.A.,
RA Wilming L., Wary P.W., Hubbard T., Durbin R.M., Bentley D.R., Beck S.,
RA Kay M. P. W., Hubbard T., Durbin R.M., Bentley D.R., Beck S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nature 414:865-871(2001).
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ween the Swiss Institute of Bioinformatics
European Bioinformatics Institute. There a
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SIMILARITY: BELONGS T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          absence of KCNB1.

TISSUE SPECIFICITY: Detected in all tissues tested with the PISSUE SPECIFICITY: Detected in all tissues tested with and exception of skeletal muscle. Highly expressed in adult and brain, fetal kidney and lung, and adult prostate and testis. DOMAIN: The segment S4 is probably the voltage-sensor and is characterized by a series of positively charged amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FUNCTION: Potassium channel subunit. Mod and reduces the ion flow (By similarity) SUBUNIT: Heteromultimer with KCMB1 and homomultimers. Might also bind to other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                similarity).
SUBCELLULAR LOCATION:
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PRINTS; PRO0169; PRINTS; PR01494; PRINTS; PR01491; SMART; SM00225; Transport;
Potassium c
Multigene f DOMAIN TRANSMEM TRANSMEM Pfam; Pfam; MIM; Genew; EMBL; AF043473; AAC13165.2; -.
EMBL; Z93016; CAB07507.2; -. InterPro; IPR003968; InterPro; IPR005820; InterPro; IPR003091; InterPro; IPR003131; InterPro; IPR003971; InterPro; IPR000210; InterPro; IPR005821; InterPro; IPR001622; n; PF00520; ion_trans; 1.
n; PF02214; K tetra; 1.
YTS; PF00169; KCHANNEL.
NTS; PF01494; KV9CHANNEL.
NTS; PF01491; KVCHANNEL. HGNC: 6300; family. channel; Ion transport; Ionic 1 222 275 BTB; KCNS1. 221 242 295 Potassium; K_tetra.
K_tetra.
Kv9_channel.
Kv_Channel.
Kv_Channel. K+channel_pore. BTB_POZ Ion trans. CYTOPLASMIC SEGMENT S1 () SEGMENT S2 () Potassium channel; Voltage-gated transport; (POTENTIAL) (POTENTIAL)

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                 This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the EM the European Bioinformatics Institute. There are no restruse by non-profit institutions as long as its content modified and this statement is not removed. Usage by and entities requires a license agreement (See http://www.isb-sor send an email to license@isb-sib.ch).
                                                                                                                                                                                 phosphotransferase system.";
Infect. Immun. 60:3369-3375 (1992).
-!- FUNCTION: NOT NECESSARY FOR MANNITOL UTILIZATION. MAY BE INVOLVED
IN REGULATION OF THE MANNITOL PHOSPHOENOLPYRUVATE-DEPENDENT SUGAR
PHOSPHOTRANSFERASE SYSTEM (PTS).
                                                                                                                                                                                                                                                                              Honeyman A.L., Curtiss R. III, "Isolation, characterization, and nucleotide sequence of the Streptococcus mutans mannitol-phosphate dehydrogenase gene amannitol-specific factor III gene of the phosphoenolpyruvate
                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE OF 525-650 FROM N.A. STRAIN=UA130 / Serotype C; MEDLINE=92348013; PubMed=1322373;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE=22295063; PubMed=12397186;
Ajdic D., McShan W.M., McLaughlin R.E., Savic G., Chang J.,
Carson M.B., Primeaux C., Tian R., Kenton S., Jia H., Lin S.,
Li S., Zhu H., Najar F., Lai H., White J., Roe B.A., Ferretti
"Genome sequence of Streptococcus mutans UA159, a cariogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "The mannitol specific enzyme II (mtlA)
PTS of Streptococcus mutans.";
Microbiology 146:1565-1572 (2000).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A., AND FUNCTION. STRAIN-UA130 / Serotype C; MEDLINE-20340960; PubMed-10878121;
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28-FEB-2003
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SEGMENT S4 (POTENTIAL).
CYTOPLASMIC (POTENTIAL).
SEGMENT S5 (POTENTIAL).
SEGMENT H5 (PORE-FORMING)
SEGMENT S6 (POTENTIAL).
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00F0E415E3A68C91 CRC64;
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                                          (See http://www.isb-sib.
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a H., Lin S.,
A., Ferretti
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                                                                                                                          a collaboration - MBL outstation -
                                                                  for
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RESULT 37
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28-FEB-2003
28-FEB-2003
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TISSUB-B-cell lymphoma;
MEDLINE-97131508; PubMed-8975706;
Miura Y., Miyake K., Yamashita Y., S
Gilbert D.J., Jenkins N.A., Inazawa
"Molecular cloning of a human RP105"
                                                                                                                                                                                                                         Blood
                                                                                                                                                                                                                                                      MEDLINE=98438337; PubMed=9763566;
Miura Y., Shimazu R., Miyake K.,
Nariaawa Y., Kimoto M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL;
         This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation -
                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    kDa protein).
LY64 OR RP105.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CD180 antigen
                                                                                                                                                                                                                                       numan
                                                                                                                                                                                                                                                                                INTERACTION WITH MD-1.
MEDLINE=98438337; PubM
                                                                                                                                                                                                                                                                                                                    localization of the mouse and Genomics 38:299-304(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C180 HUMAN
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                                                                                   immune response to bacterial lipopolysacchar Leads to NF-kappa-B activation. Also involve decision of B cells (By similarity).

SUBUNIT: Binds to MD-1.
SUBUNIT: Binds to MD-1.
ITISSUE SPECIFICITY: Expressed mainly on matucells. Detected in spleen, lymph node and appin pre-B and -T cells.
DISEASE: Decreased expression of LY64 has bely logs erythematosus (SLE). The loss of LY64 cell activation and increased disease activity
                                                                                                                                                                                                                                                "RP105 is associated with MD-1 and transmits
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local
                                      DISEASE: Decreased expression of LY64 has been shown in systemic lupus erythematosus (SLE). The loss of LY64 is associated with B-cell activation and increased disease activity in SLE patients. SIMILARITY: BELONGS TO THE TOLL-LIKE RECEPTOR FAMILY. SIMILARITY: Contains 17 leucine-rich (LRR) repeats. DATABASE: NAME-PROW; NOTE-PROW 1:56-58(2000); WMW="http://www.ncbi.nlm.nih.gov/prow/guide/340502642_g.htm".
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         151
                                                                                                                                                                                                                        B cells.";
92:2815-2822(1998).
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AE014955; AAN58874.1;
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7; Conserv
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(Rel. 41, Last sequence update)
(Rel. 41, Last annotation update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        precursor (Lymphocyte
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Primates;
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                                                                                                                                                                                                                                                                                                                                human
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Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT;
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                                                                                                                                                                                         MD-1 and TLR4 to mediate the innate lipopolysaccharide (LPS) in B cells on. Also involved in the life/death
                                                                                                                                                                                        lipopolysaccharide on. Also involved in
                                                                                                                                                                                                                                                                       Akashi
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                                                                                                                                                                                                                                                                                                                              J., Abe T., Kimoto M.;
homologue and chromosomal
RP105 genes (Ly64 and LY6
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Best Local S
Matches 7
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P82295; Q95RK1; Q9VZV0;

16-CCT-2001 (Rel. 40, Created)

16-CCT-2001 (Rel. 40, Last sequence up

15-SEP-2003 (Rel. 42, Last annotation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CARBOHYD
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CHAIN
DOMAIN
    Drósophila melanogaster (Fruit fly).
Eukaryota; Metazoa; Arthropoda; Hespoda; Inse
Neoptera; Endopterygota; Diptera; Brachycera;
Ephydroidea; Drosophilidae; Drosophila.
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InterPro; IPR000483; LRR_Cterm
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or; Immune response;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity 7; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                         LLLAILL 16
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RA Brandon R.C., Rogers Y.-H.C., Blazej R.G., Champe M., Pfeiffer B.D.,
RA Barandon R.C., Rogers Y.-H.C., Blazej R.G., Champe M., Pfeiffer B.D.,
RA Ballew R.M., Bagbyani A., An H.-J., Andrews-Pfannkoch C.R., Miklos G.L.G.,
RA Ballew R.M., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M.,
RA Beeson K.Y., Benos P.V., Berman B.P., Bhandari D., Bolshakov S.,
RA Borkova D., Botchan M.R., Bouck J., Brokstein P., Brottier R.,
Charty J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA Borkova D., Botchan M.R., Bouck J., Brokstein P., Brottier P.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
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RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA Glodek A., Gong F., Gorrell J.H., Gu Z., Guan P., Harris M.,
RA Foller C., Gabrielian A.E., Garg N.S., Gelbart W.M., Glasser K.,
RA Kimmel B.B., Kodira C.D., Kraft C., Kravitz S., Kulp D., Lai Z.,
RA Kimmel B.B., Kodira C.D., Kraft C., Kravitz S., Kulp D., Lai Z.,
RA Kimmel B.B., Kodira C.D., Kraft C., Kravitz S., Kulp D., Lai Z.,
RA Melson D.R., Nelson K.A., Nixon K., Nusskern D.R., Pacleb J.M.,
RA Melson D.R., Nelson K.A., Nixon K., Nusskern D.R., Pacleb J.M.,
RA Melson D.R., Nelson K.A., Nixon K., Nusskern D.R., Pacleb J.M.,
RA Melson D.R., Nelson K.A., Nixon K., Nusskern D.R., Smith T.,
RA Spier B., Spradling A.C., Stapleton M., Skupski M.P., Smith T.,
RA Sylrakas R., Tector C., Turner R., Venter E., Wang A.H., Wang X.,
RA Klamel S.M., Woodage T., Worley K.C., Wu D., Yang S., Yao Q.A.,
RA Klamel S.M., Ra Marking R.M., Sho
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    George R.A., Guarin H., Kronmiller
Rubin G.M., Celniker S.E.;
"A Drosophila full-length CDNA resc
Genome Biol. 3:RESEARCH0080.1-RESEZ
                                                                                              MEDLINE=22426066; PubMed=12537569; Stapleton M., Carlson J.W., Brokst
                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRAIN=Berkeley;
MEDLINE=22426069; PubMed=12537572;
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a full-length cDNA resource.";
3:RESEARCH0080.1-RESEARCH0080.8(2002).
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G., Scherer S.E., Li P.W., Hoskins R.A., Galle R.F.,
Lewis S.E., Richards S., Ashburner M., Henderson S.N.,
Wortman J.R., Yandell M.D., Zhang Q., Chen L.X.,
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a Drosophila ortholog of mouse prominin
-like 1.";
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Viruses; ssRNA positive-strand
Flavivirus.
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CARBOHYD
                                     MEDLINE=92263809; PubMed=15
Fu J., Tan B.H., Yap E.H.,
"Full-length cDNA sequence
                                                                                                                                                                                                                                         01-FEB-1994 (Rel. 28, Created)
01-FEB-1994 (Rel. 28, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
28-FEB-2003 (Rel. 41, Last annotation update)
Genome polyprotein [Contains: Capsid protein C (Core protein); Matrix protein (Envelope protein M); Major envelope protein E; Nonstructural proteins NS1, NS2B, NS2B, NS4A and NS4B; Protease/helicase (EC 3.4.21.98) (NS3); RNA-directed RNA polymerase (EC 2.7.7.48)
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EMBL;
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SUBUNIT: THE VIRION OF THIS VIRUS IS A NUCLEOCAPSID COVERED BY
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                                                                                                               PubMed=1585663;
Yap E.H., Chan Y.C., sequence of dengue
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live-strand viruses, no DNA stage; Flaviviridae;
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SMART; SM00487; DEXDC; 1.
SMART; SM00490; HELICC; 1.
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| IPR000069;
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FtsJ;
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                                                                                                                    DEAH BOX
                                                                                                        POTENTIAL.
                                                                                                                                            (POTENTIAL).
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PRM, PROTEIN M AND GLYCOPROTEIN B. THE NUCLEOCAPSID OF PROTEIN C AND MENA. SI

This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the Entropean Bioinformatics Institute. There are no restructe by non-profit institutions as long as its content modified and this statement is not removed. Usage by and (See http://www.isb-sib.ch/announce/ restrictions on in 18 ø for collaboration 'n commercia.

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Envelope protein; Hydrolase;
Nonstructural protein.
CAPSID PROTEIN C (POTENTIAL)
                                                                                                                                                                                                                                                                                                                       NONSTRUCTURAL PROTEIN NS4A (POTENTIAL)
NONSTRUCTURAL PROTEIN NS4B (POTENTIAL)
RNA-DIRECTED RNA POLYMERASE (NS5)
                                                                                                                                                                                                                                                                                                                                                                                                   MAJOR ENVELOPE PROTEIN E (POTENTIAL).
NONSTRUCTURAL PROTEIN NS1 (POTENTIAL).
NONSTRUCTURAL PROTEIN NS2A (POTENTIAL).
NONSTRUCTURAL PROTEIN NS2B (POTENTIAL).
PROTEASE/HELICASE (NS3) (POTENTIAL).
PROTEASE/HELICASE (NS3) (POTENTIAL).
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(GLCNAC.
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CARBOHYD
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Pfam; PRO0895; ATP-synt_8; 1.
Hydrogen ion transport; CF(0); Mitochondrion;
POTENTIAL.
POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; J04815; AAA66
PIR; F34284; F34284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 the European Bioinformatics Institute. There are no restrict use by non-profit institutions as long as its content is modified and this statement is not removed. Usage by and for entities requires a license agreement (See http://www.isb-sib.or send an email to license@isb-sib.ch).
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"The complete nucleotide sequence, gene organization, and genetic code of the mitochondrial genome of Paracentrotus lividus.";
J. Biol. Chem. 264:10965-10975(1989).
-!- FUNCTION: THIS IS ONE OF THE CHAINS OF THE NONENZYMATIC COMPONENT (CF(0) SUBUNIT) OF THE MITOCHONDRIAL ATPASE COMPLEX.
-!- CATALYTIC ACTIVITY: ATP + H(2)O + H(+)(In) = ADP + phosphate +
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SUBCELLULAR LOCATION: Membrane-bound
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28-FEB-2003 (Rel. 41, Created)
28-FEB-2003 (Rel. 41, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
28-FEB-2003 (Rel. 41, Last annotation update)
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ZN FING
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SEQUENCE FROM N.A.
STRAIR=ATCC 824 / DSM 792 / VKM B-1787;
MEDLINE=21359325; PubMed=11466286;
Noelling J., Breton G., Omelchenko M.V.
Gibson R., Lee H.M., Dubois J., Qiu D.,
                                                                                                                                                             Clostridium acetobutylicum. Bacteria; Firmicutes; Clost Clostridium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PROSITE; PS00028; ZÏNC FINGER C2H2 1; 1.

PROSITE; PS50157; ZINC FINGER C2H2 2; 2.

Developmental protein; Gap protein; Zinc-finger; Metal-binding; DNA-binding; Repeat; Nuclear prot
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; L01587; AAA27734.1;
InterPro; IPR007087; Znf C
Pfam; PF00096; zf-C2H2; Z
SMART; SM00355; ZnF_C2H2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This SWISS-PROT entry is copyright. It is produced through a between the Swiss Institute of Bioinformatics and the EWRITCHE European Bioinformatics Institute. There are no restrict use by non-profit institutions as long as its content is modified and this statement is not removed. Usage by and fentities requires a license agreement (See http://www.isb-sib
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Drosophila segmentation genes.";
Proc. Natl. Acad. Sci. U.S.A. 89:1070
-1- FUNCTION: GAP CLASS SEGMENTATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Apis mellifera (Honeybee).

Eukaryota, Metazoa, Arthropoda, Hexapoda, Insecta, Pterygota,
Neoptera, Endopterygota, Hymenoptera, Apocrita, Aculeata, Apoidea,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15-SEP-2003 (Rel. 42, Last annotation update)
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Sommer R.J., Retzlaff M., Goerlich
                                                                                                                                          NCBI_TaxID=1488;
                                                                                                                                                                                                                                       XSEB OR CAC2081.
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bois J., Qiu D., Hitti J.,
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         K.S., Zeng
Wolf Y.I.,
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PIR; E97156; E97156.

HAMAP; MF 00337; -; 1.

InterPro; IPR003761; Exonuc VII S; 1.

Pfam; PF02609; Exonuc VII S; 1.

ProDom; PF028235; Exonuc VII S; 1.

ProDom; PF028235; Exonuc VII S; 1.

ProJobase; Nuclease; Exonuclease; COSEQUENCE 77 AA; 8923 MW; FB895E7
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P16364;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; (Archosauria; Aves; Neognathae; Corcoracinae; Corcorax.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cytochrome b (Fragment).
MTCYB OR COB OR CYTB.
                                                                                                                                                                                                                                                                              Kocher T.D., Thomas W.K., Meyer A., Edwards S.V., Paabo S., Villablanca F.X., Wilson A.C.; "Dynamics of mitochondrial DNA evolution in animals: amplification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Corcorax melanorhamphos (White-winged chough) (Crow).
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- FUNCTION: Bidirectionally degrades single-stranded DNA into large acid-insoluble oligonucleotides, which are then degraded further into small acid-soluble oligonucleotides (By similarity).

- CATALYTIC ACTIVITY: Exonucleolytic cleavage in either 5'- to 3'- or 3'- to 5'-direction to yield nucleoside 5'-phosphates.

- SUBUNIT: Heterooligomer composed of large and small subunits (By
                                                                   | sequencing with conserved primers.";
| c. Natl. Acad. Sci. U.S.A. 86:6196-6200(1989).
| FUNCTION: Component of the ubiquinol-cytochrome c reductase complex (complex III or cytochrome b-cl complex), which is a respiratory chain that generates an electrochemical potential coupled to ATP synthesis (By similarity).
| COPACTOR: Binds two heme groups non-covalently. Heme 1 (or BL b562) is low-potential and absorbs at about 562, and heme 2 (because of the control of the couple o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    European Bioinformatics Institute. There are no restrictions on its
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itles requires a license agreement (See http://www.isb-sib.ch/announce/
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(Rel. 15, Last sequence update)
(Rel. 42, Last annotation update)
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The main subunits of complex b-cl are: cytochrome
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Veognathae; Passeriformes; Grallinidae;
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P16362;
01-AUG-1990
01-AUG-1990
                                                       This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                      Proc.
                                                                                                                                                                                                                       Kocher T.D., Thomas W.K., Meyer A., Edwards S.V., Paabo S., Villablanca F.X., Wilson A.C.; "Dynamics of mitochondrial DNA evolution in animals: amplification
                                                                                                                                                                                                                                                           SEQUENCE FROM N.A. MEDLINE=89345630; PubMed=2762322;
                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Archosauria; Aves; Neognathae; Passeriformes; Timaliidae;
                                                                                                                                                                                                                                                                                                                                                                           Cytochrome b (Fragment).
MTCYB OR COB OR CYTB.
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InterPro; IPR005798; Cytb b6 C.
InterPro; IPR005797; Cytb b6 N.
Pfam; PF00033; Cytochrome b N; 1.
PROSITE; PS00193; CYTOCHROME B QO; PARTIAL.
PROSITE; PS00192; CYTOCHROME B HEME; 1.
                                                                                                                                                                                                                                                                                                                                                   Mitochondrion.
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                                                                                                                                                                                                                                                                                                 NCBI_TaxID=9177;
                                                                                                                                                                                                                                                                                                               Pomatostomus
                                                                                                                                                                                                                                                                                                                         Archosauria; Aves;
                                                                                                                                                                                                                                                                                                                                                             Pomatostomus superciliosus (White-browed babbler).
                                                                                                                                                                                                                                                                                                                                                                                        Cytochrome b
                                                                                                                                                                                                                                                                                                                                                                                                   15-SEP-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cytochrome c1 and the Rieske protein (By similarity). SIMILARITY: Belongs to the cytochrome b family.
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(Rel. 15, Last sequence update)
(Rel. 42, Last annotation update)
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IRON 2
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           Yamashita T., Saito K.;

"Purification, primary structure, ar

"pig neutrophil cationic peptides.";

Infect. Immun. 57:2405-2409 (1989).
                                                                                                                                                                                            pig bone
Biochem.
                                                                                                                                                                                                                                                                                                                                                               TISSUE=Peritoneal neutrophils;
MEDLINE=87306884; PubMed=3623703;
Selsted M.E., Harwig S.S.L.;
"Purification, primary structure, and antimicrobial activities guinea pig neutrophil defensin.";
Infect. Immun. 55:2281-2286(1987).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nagaoka I., Someya A., Iwabuchi K
"Characterization of cDNA clones
cationic peptides.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRAIN-Hartley; TISSUE-Bone marrow; MEDLINE-91192152; PubMed-2013325; Nagaoka I., Someya A., Iwabuchi K.,
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MEDLINE=89307555; P
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Mammalia; Eutheria; Rodentia; Hystricognathi; Caviidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         InterPro; IPR005798; Cytb_b6 C.
InterPro; IPR005797; Cytb_b6 N.
InterPro; IPR005797; Cytb_b6 N.
InterPro; IPR005797; Cytb_b6 N.
InterPro; IPR005797; Cytb_b6 N.
InterPro; IPR005797; CytoChrome_b N; 1.
InterPro; PR00193; CYTOCHROME_B HEME; 1.
InterPro; PR00192; CYTOCHROME_B HEME; 1.
InterPro; PR00192; CYTOCHROME_B HEME; 1.
InterPro; PR00192; CYTOCHROME_B HEME; 1.
                                                                                                                                                  SEQUENCE OF 63-93
                                                                                                                                                                                                                                                           Ħu J.,
                                                                                                                                                                                                                                                                        TISSUE=Bone marrow;
MEDLINE=92062075; PubMed=1659400;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE OF 63-93.
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                                                                                                                                                                                                                                  "Isolation and characterization of
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                                                                                                                                                                                        marrow.";
. Biophys. 1
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HAS ANTIBIOTIC,
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                                                              biological
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ANTI-FUNGI AND ANTIVIRAL
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01-FEB-1996 (Rel. 33, Created)
01-FEB-1996 (Rel. 33, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Neutrophil cationic peptide 2 precursor (CP-2)
Cavia porcellus (Guinea pig).
Eukaryota; Metazoa; Chordata; Craniata; Verteb:
Mammalia; Eutheria; Rodentia; Hystricognathi;
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SEQUENCE FROM N.A.
STRAIN=Hartley; TISSUE=Liver;
MEDLINE=94227245; PubMed=8173076;
Nagaoka I., Nonoguchi A., Yamashita T.;
"Cloning and characterization of the guinea"
                                                                                                                                                                                           SEQUENCE FROM N.A.
STRAIN-Hartley; TISSUE=Liver;
MEDLINE=92275076; PubMed=1592112;
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STRAIN-Hartley; TISSUE=Bone marrow;
MEDLINE=91192152; PubMed=2013325;
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CHAIN
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"Characterization of CDNA clones en
cationic peptides ",
FBBS Lett. 280:287-291(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
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EMBL; X57705; CAA40880.1;
EMBL; D37971; BAA07189.1;
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                                                                                                                                                                            Nagaoka I.,
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-!- SIMILARITY: BELONGS TO THE CORTICOSTATIN/DEFENSIN FAMILY.
                                                                                                                                                      Structure
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http://www.isb-sib.ch/announce/
    pig neutrophil cationic
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           STRAIN=JAL-1 / DSM 2661 / ATCC 43067;

MEDLINE=96337999; PubMed=8688087;

Bult C.J., White O., Oleen G.J., Zhou L., Fleischmann R.D.,

Sutton G.G., Blake J.A., FitzGerald L.M., Clayton R.A., Gocayne J.D.,

Kerlavage A.R., Dougherty B.A., Tomb J.F., Adams M.D., Reich C.I.,

Overbeek R., Kirkness B.F., Weinstock K.G., Merrick J.M., Glodek A.,

Scott J.L., Geoghagen N.S.M., Weidman J.F., Fuhrmann J.L., Nguyen D.,

Utterback T.R., Kelley J.M., Peterson J.D., Sadow P.W., Hanna M.C.,

Cotton M.D., Roberts K.M., Hurst M.A., Kaine B.P., Borodovsky M.,

Klenk H.-P., Fraser C.M., Smith H.O., Woese C.R., Venter J.C.,

"Complete genome sequence of the methanogenic archaeon, Methanococcus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              between the Swiss Institute of Bioinformatics and the E
the European Bioinformatics Institute. There are no rest
use by non-profit institutions as long as its content
modified and this statement is not removed. Usage by a
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DNA Seq. 4:123-128(1993).
-!- FUNCTION: THIS PEPTIDI
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16-OCT-2001
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 "Complete genome jannaschii.";
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IPR006080; Defensin_mammal.
IPR002366; Defensin_propep.
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15-JUL-1998 (Rel. 36, Last sequence up
28-FEB-2003 (Rel. 41, Last annotation
Cell division protein ftsB.
FTSB OR B2748 OR 24056 OR ECS3602.
                        MEDLINE=21156231; PubMed=11258796;
Hayashi T., Makino K., Ohnishi M., Kurokawa K., Ishii K., Yokoy.
Hayashi T., Makino K., Ohnishi M., Kurokawa K., Tanaka M., Tobe '
Iida T., Takami H., Honda T., Sasakawa C., Ogasawara N., Yasuna;
Kuhara S., Shiba T., Hattori M., Shinagawa H.;
Kuhara S., Shiba T., Hattori M., Shinagawa H.;
O157:H7 and genome sequence of enterohamorrhagic Escherichia coli
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRAIN-K12 / MG1655;
MEDLINE-97426617; PubMed-9278503;
Blattner F.R., Plunkett G. III, Bloc
Riley M., Collado-Vides J., Glasner
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Enterobacteriaceae; Eschei
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                                                                                                                                                                                          STRAIN=0157:H7
                                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                            Nature 409:529-533(2001).
                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE=21074935; PubMed=11206551; Perna N.T., Plunkett G. III, Burland V.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRAIN=0157:H7 /
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an email to license@isb-sib.ch).
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.D., Rode C.K., May
A., Goeden M.A., Ro
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                                                                                                                                     Ishii K., Yokoyama K.,
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yhew G.F.,
                                                                                              Yasunaga
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I_SHVX
VMEM_SHVX
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DOMAIN
SEQUENCE
"Nuclectide sequence of shallot virus X RNA reveals a 5'-proxim cistron closely related to those of potexviruses and a unique arrangement of the 3'-proximal cistrons.";
J. Gen. Virol. 73:2553-2560(1992).
-I- SUBCELLULAR LOCATION: Integral membrane protein (Potential)
                                                                                  SEQUENCE FROM N.A.
MEDLINE-93019008; PubMed=1339468;
KANJUKA K.V., Vishnichenko V.K.,
Ryabov E.V., Zavriev S.K.;
                                                                                                                                                                                                                                            Q04582;
01-JUN-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Proc. Natl. Acad. Sci. U.S.A. 99:6316-6321(2002).
-!- FUNCTION: Required for the cell division process.
-!- SUBUNIT: May interact with ftsL.
-!- SUBCELLULAR LOCATION: Type II membrane protein. Inn (Potential). Colocalizes with ftsL to the division
-!- SIMILARITY: BELONGS TO THE FTSB FAMILY.
                                                                                                                                                                                    11.2 kDa membrane protein Shallot virus X (ShVX).
                                                                                                                                                                                                                01-JUN-1994 (Rel. 29,
01-JUN-1994 (Rel. 29,
01-OCT-1994 (Rel. 30,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HAMAP; MF 00599; -; 1.
InterPro; IPR007060; DivIC.
Pfam; PF04977; DivIC; 1.
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PIR; C85924; C85924.
PIR; H65055; H65055.
ECGGene; EG13111; ftsB.
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EMBL; AE000358; AAC75790.1; ---
EMBL; AE005502; AAC57855.1; ---
EMBL; AP002562; BAB37025.1; ---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE=21980622; PubMed=11972052; Buddelmeijer N., Judson N., Boyd D., Mekalanos J.J., Beckwith J.; Buddelmeijer N., Judson N., Boyd D., Mekalanos J.J., Beckwith J.; "Y9bQ, a cell division protein in Escherichia coli and Vibrio cholerae, localizes in codependent fashion with FtsL to the division
                                                                                                                                                      Viruses; ssRNA positive-strand viruses, no NCBI_TaxID=31770;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation -
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PERIPLASMIC (POTENTIAL).

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                                                                               Hypothetical protein; SIGNAL 1 21
                                                                                                                                                                                                                                                                         "The complete genome sequence of Escherichia coli K-12."; Science 277:1453-1474 (1997).
                                                                                                                                                                                                                                                                                                                MEDLINE=97426617; PubMed=9278503;
Blattner F.R., Plunkett G. III, Bloch C.A., Perna N.T., Burland V.,
Riley M., Collado-Vides J., Glasner J.D., Rode C.K., Mayhew G.F.,
Gregor J., Davis N.W., Kirkpatrick H.A., Goeden M.A., Rose D.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     YNFB
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                                                                                                                                                                                        the European Bioinformatics Institute. There are no restrictions on use by non-profit institutions as long as its content is in no modified and this statement is not removed. Usage by and for commen
                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A. STRAIN=K12 / MG1655;
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                                                                                                        EcoGene; EG13840; ynfB
                                                                                                                                                                entities requires a license agreement (Some send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                 This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation
                                                                                                                                                                                                                                                                                                                                                                                                                            Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
Enterobacteriaceae; Escherichia.
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ProDom; PD001561; Plant_vir_pr
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InterPro; IPR001896;
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RESULT
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InterPro; 1:
"fam; PF00031; C'
103 f
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Mammalia; Eutheria;
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SMART; SM00043; CY; 1.
SEQUENCE 138 AA; 16506 M
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01-JUN-2002
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Adams M.D., Celniker S.E., Holt R.A., Evans C.A., Gocayne J.D., Amanatides P.G., Scherer S.E., Li P.W., Hoskins R.A., Galle R.F., George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N., Sutton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X., Sutton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X., Brandon R.C., Rogers Y.-H.C., Blazej R.G., Champe M., Pfeiffer B.D., Wan K.H., Doyle C., Baxter E.G., Helt G., Nelson C.R., Miklos G.L.G., Abril J.F., Agbayani A., An H.-J., Andrews-Pfannkoch C., Baldwin D., Ballew R.M., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M., Beeson K.Y., Benos P.V., Berman B.P., Bhandari D., Bolshakov S., Borkova D., Botchan M.R., Bouck J., Brokstein P., Brottier P., Burtis K.C., Busam D.A., Butler H., Cadieu E., Center A., Chandra I.
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CG31956 OR CG8845.
Drosophila melanogaster (Fruit fly).
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01-MAY-2000
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01-MAR-2003
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J. Bacteriol. 182:5600-5605(2000).
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"Characterization of the lacticin 48
genes lctF, lctE, and lctG encode a
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"Lantibiotic biosynthesis: interactions
its putative modification enzyme, lctM."
J. Bacteriol. 182:5262-5266 (2000).
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RA de Pablos B., Delcher A., Deng Z., Mays A.D., Dew I., Dietz S.M.,
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Pfam; PP00652; Ricin_B_lectin; 2.
                                                                                                                                                                          FlyBase; FBgn0051776; CG31776.
FlyBase; FBgn0051956; CG31956.
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PS50231; RICIN B LECTIN; 1.
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Kaminker J.S., Prochnik S.B., Smith C.D.
Carlson J.W., Celniker S.E.
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  183452C643CEF881 CRC64;
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                                                                                                                                                                                                                             cyanobacterium Anabaena sp. DNA Res. 8:205-213(2001).
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NCBI_TaxID=7227;
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Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
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01-NOV-1999 (TrEMBLrel. 12, C:
01-NOV-1999 (TrEMBLrel. 12, L:
01-MAR-2003 (TrEMBLrel. 23, L:
Y39AlA.22 protein.
                                                                                                                    Q8MXI9
Q8MXI9;
01-OCT-2002
01-OCT-2002
01-MAR-2003
                                                                    Caenorhabditis elegans.
Eukaryota; Metazoa; Nematoda;
Rhabditidae; Peloderinae; Caes
                                                                                                                                                                                                                                                                                          Pfam; PF03124; EXS;
Pfam; PF03105; SPX;
SEQUENCE 710 AA;
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                  SEQUENCE FROM N.A.
STRAIN=Bristol N2;
MEDLINE=99069613; PubMed=9851916;
                                                                                                  ITR-1 protein (cc F33D4.2 OR ITR-1.
                                                                                                            ITR-1
                                                                                                                                                                                                                                                                                                                                             EMBL; AL031633; CAA21031.1; -. WormPep; Y39A1A.22; CE19142.
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                                                                                                                                                                                                                                                                                                                                                                                                                                       Submitted (SEP-1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Nematoda; Chromadorea; Rhabditida; Rhabditoidea; Rhabditidae; Peloderinae; Caenorhabditis.
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Waterston R.;
"Genome seque
                                                         NCBI_TaxID=6239;
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InterPro; IPR004331; SPX.
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Science 282:2012-2018(1998).
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                                                                                                (TrEMBLrel. 22, Created)
(TrEMBLrel. 22, Last sequence update)
(TrEMBLrel. 23, Last annotation update)
in (corresponding sequence F33D4.2g).
                                                                                                                                                                                                                                                      Conservative
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100.0%; Pr
 the nematode C.
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                                                                     oda; Chromadorea; Caenorhabditis.
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Last annotation update)
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elegans: a
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o. 7.4;
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                                                                              Rhabditida; Rhabditoidea;
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Best Local
"Direct Submission.";
Submitted (OCT-2001) to the EMBL/GenBs Submitted (OCT-2001) to the EMBL/GenBs EMBL; AF036702; AAK68363.1; -.
WormPep; F33D4.2c; CE28015.
InterPro; IPR000699; Ca-rel_channel.
InterPro; IPR000493; InsP3 receptor.
InterPro; IPR003608; MIR.
Pfam; PF02815; MIR; 2.
Pfam; PF01365; RYDR_ITPR; 2.
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01-DEC-2001
01-MAR-2003
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Q95X73;
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Pfam; PF01365; RYDR ITPR; 2.
PRINTS; PR00779; INSP3RECEPTR.
SMART; SM00472; MIR; 3.
SEQUENCE 1713 AA; 196075 MW
                                                                                                                                                                                                                                                                                              Stellyes L., Johnson D.;
"The sequence of C. elegans
Submitted (DEC-1997) to the
                                                                                                                                                                                                                                                                                                                                                                                                                              "Genome sequence of the nematode C. elegans: a platform for investigating biology. The C. elegans Sequencing Consortium."; Science 282:2012-2018(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
STRAIN=Bristol N2;
MEDLINE=99069613; PubMed=9851916;
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Eukaryota; Metazoa; Nematoda; Chromadorea; Rhabditida;
Rhabditidae; Peloderinae; Caenorhabditis.
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STRAIN-Bristol N2;
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                                                                                                                                                                                                        Waterston R.;
                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
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InterPro; IPR003608; MIR.
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InterPro; IPR000699; Ca-rel
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19,
23,
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                                                                                                                                                                                                                                                                                                cosmid F33D4.";
EMBL/GenBank/DDBJ
                                                                                                                                                              EMBL/GenBank/DDBJ databases
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EMBL/GenBank/DDBJ
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annotation update)
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16;
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Q9Y0A2;
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01-NOV-1999
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Q9U3B3;
01-MAY-2000
                                            Caenorhabditis elegans.
Eukaryota; Metazoa; Nematoda; Chromadorea;
Rhabditidae; Peloderinae; Caenorhabditis.
                                                                                                                                                                                   protein).
ITR-1 OR F33D4.2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRINTS; PRO0779; INSP3RECEPTR.
SMART; SM00472; MIR; 3.
Ionic channel; Receptor; Transmembrane.
SEQUENCE 2836 AA; 324561 MW; 3A2385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pfam; PF00520; ion trans; 1.
Pfam; PF02815; MIR; 2.
Pfam; PF01365; RYDR ITPR; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  nervous system, pharynx, intesting Caenorhabditis elegans and are endernous are endernous and are ende
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Baylis H.A., Furnichi T., Yoshikawa F., Mikoshiba K., Sattelle "Inositol 1,4,5-trisphosphate Receptors are strongly expressed nervous system, pharynx, intestine, gonad and excretory cell of Caenorhabditis elegans and are encoded by a single gene (itr-1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Caenorhabditis elegans.
Eukaryota; Metazoa; Nematoda; Chromadorea; Rhabditidae; Peloderinae; Caenorhabditis.
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SMART; SM00472; MIR; 3.
Hypothetical protein.
SEQUENCE 1862 AA; 213026 MW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   InterPro; IPR001682; Ca/Na pore
InterPro; IPR000493; InsP3_rece
InterPro; IPR005821; Ion_trans.
InterPro; IPR003608; MIR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRAIN=Bristol N2;
MEDLINE=20079510; PubMed=10610772;
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01-OCT-2002
NCBI_TaxID=6239;
                                                                                                                                                                                                                                                                   Inositol 1,4,5-trisphosphate
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      InterPro;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IPR000699; Ca-rel channel.
IPR001682; Ca/Na_pore.
IPR000493; InsP3_receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  al protein.
1862 AA;
                                                                                                                                                                                                                                        (TrEMBLrel. 12, Created)
(TrEMBLrel. 12, Last sequence update)
(TrEMBLrel. 23, Last annotation update)
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(TrEMBLrel. 13, Last sequence up)
(TrEMBLrel. 22, Last annotation
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 8; Pred. No
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRT;
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                                                                                         Rhabditida;
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RESULT 12
Q95X74
ID Q95X7
ID Q95X7
AC Q95X7
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DT 01-DE
DT 01-MA
DE Hypot
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GN F33D4
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Q95X74;
Q1-DEC-2001 (
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Hypothetical
F33D4.2.
Caenorhabditis elegans.
Eukaryota; Metazoa; Nematoda; Chromadorea;
Rhabditidae; Peloderinae; Caenorhabditis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SMART; SM00472; MIR; 3.

Hypothetical protein; Ionic channel; Receptor; Tra
SEQUENCE 2846 AA; 325911 MW; 0186413338AB3BA2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "Direct Submission.";
Submitted (OCT-2001) to the EMBL/GenBank/DDBJ
EMBL; AJ243179; CAB45860.1; -.
EMBL; AF166688; AAF05302.1; -.
EMBL; AF036702; AAK68366.1; -.
EMBL; AF036702; AAK68366.1; -.
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"The sequence of C. elegans
Submitted (DEC-1997) to the
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SEQUENCE FROM N.A.

MEDLINE=99428139; PubMed=10499793;

Dal Santo P., Logan M.A., Chisholm A.D., Jorgensen E.M.;

"The inositol trisphosphate receptor regulates a 50-second behavioral rhythm in C. elegans.";

Cell 98:757-767(1999).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pfam; PF00520; ion_trans; 1.
Pfam; PF02815; MIR; 2.
Pfam; PF01365; RYDR_ITPR; 2.
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InterPro; IPR001682; Ca/Na_pore.
InterPro; IPR000493; InsP3_receptor.
InterPro; IPR005821; Ion_trans.
InterPro; IPR003608; MIR.
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STRAIN=Bristol N2;
MEDLINE=99069613; PubMed=9851916;
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STRAIN-BRISTOL N2;
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8; Conserv
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EMBL/GenBank/DDBJ databases.
                                                                                                                                                                         Created)
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Pred. No.
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                                                                                                                                                sequence
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                              Rhabditida;
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ID Q9Y0A
AC Q9Y0A
AC Q9Y0A
DT 01-NC
DT 01-MA
DE INOSI
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GN ITR-11
OS CAENC
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Best Local :
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Pfam; PR02815; MIR; 2.
Pfam; PR01365; RYDR ITPR; 2.
PRINTS; PR00779; INSP3RECEPTR.
SMART; SM00472; MIR; 3.
Hypothetical protein; Ionic char
SEQUENCE 2847 AA; 325818 MW;
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ITR-1 OR 1
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Q9Y0A0;
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STRALN=Britcol NZ;
MEDLINE=20079510; PubMed=10610772;
Baylis H.A., Furuichi T., Yoshikaw
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01-NOV-1999 (TrEMBLrel. 12, I
01-MAR-2003 (TrEMBLrel. 23, I
Inositol 1,4,5-trisphosphate
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Submitted (OCT-2001) to the EMBL/GenBank/DDBJ databases.
EMBL; AF036702; AAK68364.1; -.
WormPep; F33D4.2d; CE28016
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Stellyes L., Johnson D.;
"The sequence of C. eleg
Submitted (DEC-1997) to
                                                                                                                                                                                                            Baylis H.A., Furuichi T., Yoshikawa F., Mikoshiba K., Sattelle D.B.; "Inositol 1,4,5-trisphosphate Receptors are strongly expressed in the nervous system, pharynx, intestine, gonad and excretory cell of Caenorhabditis elegans and are encoded by a single gene (itr-1).";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Nematoda; Chromadorea; Rhabditida; Rhabditoidea; Rhabditidae; Peloderinae; Caenorhabditis.
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InterPro; IPR001882; Ca/Na_pore.
InterPro; IPR000493; InsP3_receptor.
InterPro; IPR005821; Ion_trans.
InterPro; IPR003608; MIR.
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SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
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STRAIN-Bristol N2;
MEDLINE-99069613; PubMed-9851916;
                                                                          STRAIN=Bristol N2;
                                                                                                           SEQUENCE FROM N.A.
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                                     MEDLINE=99069613; PubMed=9851916;
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(TrEMBLrel. 23, Last annotation update)
4,5-trisphosphate receptor (Hypothetical 327.2
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EMBL/GenBank/DDBJ databases.
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Best:Local S
Matches 8
                                                              Pfam;
Pfam;
                                                                                                         InterPro; IPR001682; Ca/N.
InterPro; IPR000493; Insp.
InterPro; IPR005821; Ion_
InterPro; IPR003608; MIR.
                                                                                                                                                                                                                                                nervous system, pharynx, intestine, gor
Caenorhabditis elegans and are encoded
J. Mol. Biol. 294:467-476(1999).
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Eukaryota; Metazoa; Nematoda;
Rhabditidae; Peloderinae; Caer
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01-NOV-1999 (TYEMBLIFE). 12, [
01-OCT-2002 (TYEMBLIFE). 22, [
Inositol 1,4,5-trisphosphate
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InterPro; IPR000699; Ca-rel_channel.
InterPro; IPR000689; Ca/Na_pore.
InterPro; IPR000493; InsP3 receptor.
InterPro; IPR003608; MIR.
InterPro; IPR003608; MIR.
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Stellyes L., Johnson D.;
Stellyes C., Johnson D.;
Annuence of C. elegans
              PRINTS;
                                                                                                                                                                                                                               EMBL; AJ243180; CAB45861.1; -
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                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Genome sequence of the nematode C. elegans: a platform for investigating biology. The C. elegans Sequencing Consortium."; Science 282:2012-2018(1998).
                                           Pfam;
                                                                                                                                                                                                       InterPro; IPR000699; Ca-rel_channel.
                                                                                                                                                                                                                                                                                                                                                                     MEDLINE=20079510; PubMed=10610772;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=6239;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ITR-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "Direct Submission.";
Submitted (OCT-2001) to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A. STRAIN=Bristol N2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Waterston R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1102
                                      PF00520; ion_trans; 1.
PF02815; MIR; 2.
PF01365; RYDR_ITPR; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PF00520; ion_trans; 1.
PF02815; MIR; 2.
PF01365; RYDR_ITPR; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AF036702; AAK68365.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AJ243182;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; PR00779; INSP3R;
SM00472; MIR; 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
8; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QLLLAILL 1109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QLLLAILL 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAB45863.1;
                     INSP3RECEPTR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INSP3RECEPTR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5.8%;
                                                                                                                                                                          Ca/Na_pore.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; Ionic channel; Receptor; Transmembrane. 327195 MW; 8B991F12BEC94E2F CRC64;
                                                                                                                                 Ion_trans
                                                                                                                                                            InsP3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         oda; Chromadorea; Rhabditida; Caenorhabditis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 8; DB 5; Pred. No. 24; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Last sequence up
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cosmid F33D4.";
EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL/GenBank/DDBJ databases.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               receptor.
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Q95X75
ID Q95X77
ID Q95X77
ID Q95X7
AC Q95X7
AC Q95X7
DT 01-DE
DT 
RESULT 16
Q9GS15
ID Q9GS1
AC Q9GS1
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Best Local S
Matches 8
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Best Local Similarity
Matches 8; Conserv
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Q95X75;
Q1-DEC-2001
01-DEC-2001
01-MAR-2003
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Q9GS15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Direct Submission.";
Submitted (OCT-2001) to the EMBL/GenBank/DDBJ databases.
EMBL; AF036702; AAK68362.1; -.
WormPep; F33D4.2a; CES8014.
InterPro; IPR000699; Ca-rel_channel.
InterPro; IPR001682; Ca/Na_pore.
InterPro; IPR001493; InsP3_receptor.
InterPro; IPR003821; Ion_trans.
InterPro; IPR003608; MIR.
                                                                                                                                                                                                                                                                                                                  PRINTS; PR00779; INSP3RECEPTR.
SMART; SM00472; MIR; 3.
Hyporhetical protein; Ionic ch
SEQUENCE 2903 AA; 332089 MW
                                                                                                                                                                                                                                                                                                                                                                                                          Pfam; PF00520; ion_trans; 1.
Pfam; PF02815; MIR; 2.
Pfam; PF01365; RYDR_ITPR; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
STRAIN-Bristol N2;
Stellyes L., Johnson D.;
"The sequence of C. elegans
Submitted (DEC-1997) to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
STRAIN-Bristol N2;
MEDLINE=99069613; PubMed=9851916;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Nematoda; Chromadorea; Rhabditidae; Peloderinae; Caenorhabditis. NCBI_TaxID=6239;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hypothetical F33D4.2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ionic channel; Receptor; Transmembrane SEQUENCE 2892 AA; 330832 MW; B1C598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
STRAIN=Bristol N2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "Genome sequence of the nematode C. investigating biology. The C. elegan Science 282:2012-2018(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Caenorhabditis elegans.
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                                                                                                                                     1139
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8; Conserv
                                                                                                                                  OLLLAILL
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                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (TrEMBLrel. 19, Created)
(TREMBLrel. 19, Last sequence update)
(TREMBLrel. 23, Last annotation update)
332.1 kDa protein.
                          PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRELIMINARY;
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                                                                                                                                     1146
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100.0%; Pr
                                                                                                                                                                                                                                                                                                                  ; Ionic channel; Transmembrane. 332089 MW; 22B738A5DC896872 CRC64;
                                                                                                                                                                                                                                                     100.0%;
                                                                                                                                                                                                                                                                        5.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cosmid F33D4.";
EMBL/GenBank/DDBJ
                                                                                                                                                                                                                             0,
                                                                                                                                                                                                                                                  Score 8; I
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                          PRT;
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ns Sequencing Consortium
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5. 25;
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                                                                                                                                                                                                                                                                        Length 2903;
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RESULT 17
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Best Local :
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Pfam; PF02815; MIR; 2.
Pfam; PF01365; RVDR ITPR; 2.
PRINTS; PR00779; INSP3RECEPTR.
SMART; SM00472; MIR; 3.
SMART; SM00472; MIR; 3.
Ionic channel; Receptor; Transmembrane.
SEQUENCE 2933 AA; 335223 MW; 0B307A206345C2FB CRC64;
                                                                                                                                                                                                                                   01-JUN-2002 (TrEMBLrel. 21, Created)
01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
NADH dehydrogenase subunit 1 (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    InterPro; IPR000699; Ca-rel_channel.
InterPro; IPR001682; Ca/Na_pore.
InterPro; IPR00193; InsP3_receptor.
InterPro; IPR0005821; Ion_trans.
InterPro; IPR003608; MIR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Caenorhabditis briggsae.
Eukaryota; Metazoa; Nematoda; Chromadorea
Rhabditidae; Peloderinae; Caenorhabditis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-MAR-2001 (TrEMBLrel. 16, Created)
01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-CCT-2002 (TrEMBLrel. 22, Last annotation update)
Putative inositol 1,4,5-trisphosphate receptor.
  SEQUENCE
                                    EMBL; AF448772; AAL90596.1;
                                                  Townsend T.M., Larson A.L.;
"Molecular Phylogenetics and Mitochondrial Genomic Evolution Chamaeleonidae (Reptilia, Squamata).";
Submitted (NOV-2001) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                              Eukaryota; Metazoa; Chordata;
                                                                                                                                                                                              Mitochondrion.
                                                                                                                                                                                                         Rhampholeon spectrum
                                                                                                                                                                                                                         ND1.
                                                                                                                                                                                                                                                                                            Q8SHB0;
                                                                                                                                                                                                                                                                                                         Q8SHB0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL; AJ293919; CAC10528.1; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    specific
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Dissection of the promoter region of the inositol 1,4,5-trisphosphate receptorgene, itr-1, in C. elegans: A molecular basis for cell-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Baylis H.A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE=21136503; PubMed=11237590; Gower N.J.D., Temple G.R., Schein J.E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Submitted (SEP-2000) to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRAIN=AF16;
Howard B.A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
               NON TER
                           Mitochondrion.
                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                    NCBI_TaxID=179929;
                                                                                                                                                   Rhampholeon
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                                                                                                                                                                 Lepidosauria; Squamata;
                                                                                                                                                                                                                                                                                                                                                                           1153 QLLLAILL 1160
                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         rgene, itr-1, in C. eregans: A m c expression of IP3R isoforms.";
Biol. 306:145-157(2001).
                                                                                                                                                                                                                                                                                                                                                                                                                                   8
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  24
                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                         PRELIMINARY;
 A.
  2666 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Nematoda; Chromadorea; Rhabditida; Rhabditoidea;
                                                                                                                                                                                                                                                                                                                                                                                                                                                5.8%; Score 8; 1
100.0%; Pred. No.
                                                                                                                                                                data; Craniata; Vertebrata; Euteleostomi; Iguania; Acrodonta; Chamaeleonidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL/GenBank/DDBJ databases
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  C95A1FA4AE3791CB CRC64;
                                                                                                                                                                                                                                                                                                          PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
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ID Q9JSK
ID Q9JSK
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STRAIN-WSB-N;
STRAIN-WSB-N;
WARDLINE-96079285; PubMed=7494484;
Ward M.J., Bell A.W., Hamblin P.A., Packer H.L.,
Ward M.J., Bell A.W., Hamblin P.A., Packer H.L.,
"Identification of a chemotaxis operon with two
Rhodobacter sphaeroides.";
Rhodobacter sphaeroides.";
Mol. Microbiol. 17:357-366(1995).
EMBL; X80027; CAA56328.1;
EMBL; X80027; CAA56
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01-NOV-1996
01-DEC-2001
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Bacteria; Chlamydiae; Chlamydiales; Chlamydiaceae; Chlamydophila.
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Bacteria; Proteobacteria; Alphaproteobacteria; Rhodobacterales;
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                                                                                                                                                                           role for chickens in the ecology of influenza?" Submitted (DEC-1999) to the EMBL/GenBank/DDBJ di EMBL, AF213907; AAL59055.1; -. InterPro; IPR000968; Flu NS2. Pfam; PF00601; Flu_NS2; I.
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Q8V6Y2;
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Campitelli L., Donatelli I., Fabiani C., Puzelli S., Fior Foni E., De Marco A., Krauss S., Webster R.G.;
"H3N2 influenza viruses from domestic chickens in Italy: role for chickens in the ecology of influenza?";
Submitled (DEC-1999) to the EMBL/GenBank/DDBJ databases.
EMBL, AF213908; AAL59056-1; -.
InterPro; IPR000968; Flu NS2.
Pfam; PF00601; Flu_NS2; 1.
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Campitelli I., Donatelli I., Fabiani C., Puzell
Foni B., De Marco A., Krauss S., Webster R.G.;
"H3N2 influenza viruses from domestic chickens
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01.MAR-2002 (TrEMBLrel. 20, Last sequence update)
01.UN-2002 (TrEMBLrel. 21, Last annotation update)
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Viruses; seRNA negative-strand viruses; Orthomyxo
Influenza A viruses; Influenzavirus A.
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                                                                                                                                         4E7B3ABC50E96E8D CRC64;
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Q9Z9D1;
Q9Z9D1;
Q1-MAY-1999
Q1-MAY-1999
Q1-MAR-2002
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SEQUENCE
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Foni E., Barigazzi G., Lin Y., Hay A.,
"Antigenic and genetic diversity among
                                                                                                                                                                                                                                                                                                            Influenza A virus (A/swine/Cotes d'Armor/604/99(H1N2)).
Viruses; ssRNA negative-strand viruses; Orthomyxoviridae;
Influenza A viruses; Influenzavirus A.
                                                                                                                                                                                                                                                                                                                                                                              01-JUN-2002
01-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRAIN=CWL029; PubMed=10192388; MEDLINE=99206606; PubMed=10192388; Kalman S., Mitchell W., Marathe R., Lammel C., Fan J., Hyman R.W., Colinger L., Grimwood J., Davis R.W., Stephens R.S.; "Comparative genomes of Chlamydia pneumoniae and C. trachomatis."; Nat. Genet 21:385-389(1999). Nat. Genet 21:385-389(1999). Nat. Genet 21:385-389(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hypothetical CPN0050.
                                                                                                                                                              J. Gen. Virol. 83:735-745(2002).
EMBL; AJ316062; CAC87415.1; -.
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MEDLINE=21904432; PubMed=11907321;
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InterPro; IPR000968; Flu_NS2.
Pfam; PF00601; Flu_NS2; I.
                                                                                                                                                                                         viruses in Europe."
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SEQUENCE 105 AA; 11587 MW; 8A7A3A3SO5C1CA74 CRC64;
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(TrEMBLrel. 21, Last sequence update)
(TrEMBLrel. 22, Last annotation update)
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(TrEMBLrel. 10, Last sequence update)
(TrEMBLrel. 20, Last annotation update)
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; 12822 MW;
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100.0%; Pr/
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Chlamydiaceae; Chlamydophila.
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STRAIN-A/Swine/Italy/636/87;

GREGOTY V., Lim W., Cameron K., Bennett M., Klimov A., Hall H.,

Gregory V., Lim W., Cameron K., Bennett M., Klimov A., Hall H.,

COX N., Hay A.J., Lin Y.;

"Infection of a child in Hong Kong by an influenza A H3N2 virus

closely related to viruses circulating in European pigs.";

J. Gen. Virol. 82:1397-1406(2001).

EMBL; AJ293940; CAC40060.1; -.

InterPro; IPR000968; Flu NS2.

Pfam; PF00601; Plu_NS2; I.
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01-DEC-2001 (TrEMBLrel.
01-DEC-2001 (TrEMBLrel.
01-MAR-2002 (TrEMBLrel.
                                                                                                                                                                                                                                                                       "Emergence of avian HIN1 influenza viruses in J. Virol. 70:8041-8046(1996).
EMBL; U49485; AAB50998.1; -.
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STRAIN=A/Swine/Iowa/17672/88;
MEDLINE=97048087; PubMed=8892928;
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                                                                                                                                                                                                                                 Pfam;
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SEQUENCE
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01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
Nonstructural protein 2 (Fragment).
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NON_TER
SEQUENCE
                                                                                                                                                                                                                                      Submitted (JUN-2001) to the EMBL/GenBank/DDBJ databases. EMBL; AV043027; AAL32489.1; ... Interpro; IPR000956; Flu NS2. Pfam; PF00601; Flu_NS2; I.
                                                                                                                                                                                                                                                                                                                                                    STRAIN=A/Guangzhou/333/99(H9N2);
Guo Y., Dong J., Wu K., Guo J., Wang M., Zhang L., Chen J.;
"Genetic characteristics of influenza H9N2 subtype viruses isolated
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STRAIN=A/Ruddy Turnstone/New Jersey/47/85;
MEDLINE=97048087; PubMed=8892928;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Influenza A virus (A/Guangzhou/333/99(H9N2)). Viruses; ssRNA negative-strand viruses; Ortho Influenza A viruses; Influenzavirus A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NS2
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01-OCT-2002
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EMBL; U49483; AAB50994.1; -.
InterPro; IPR000968; Flu NS2.
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01-JUL-1997 (TrEMBLrel. 04, Last sero
01-JUL-1997 (TrEMBLrel. 22, Last anno
Nonstructural protein NS2 (Fragment).
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"Emergence of avian H1N1 influenza viruses
J. Virol. 70:8041-8046(1996).
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Pfam; PF00601; Flu_NS2;
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  QALQLLL 103
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112 AA;
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llarity 100.0%; Pred. No. 19
Conservative 0; Mismatches
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Best Local (
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InterPro; IPR000256; Flu_NS1.
InterPro; IPR000968; Flu_NS2.
Pfam; PF00600; Flu_NS1; I.
Pfam; PF00600; Flu_NS2; 1.
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01-JUL-1997 (TrEMBLrel. 04, Created,
01-JUL-1997 (TrEMBLrel. 04, Last sequence update)
01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
Nonstructural protein NS2 (Fragment).
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SEQUENCE
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01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
01-WAR-2003 (TrEMBLrel. 23, Last annotation update)
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EMBL; U49488; AAB51004.1; -.
InterPro; IPR000968; Flu_NS2.
Pfam; PF00801; Flu_NS2; I.
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Foni E., Barigazzi G., Lin Y., Ha
"Antigenic and genetic diversity
viruses in Europe.";
J. Gen. Virol. 83:735-745(2002).
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                                                                                                                                                                                                                                                                                                                                                                         MEDLINE=21904432; PubMed=11907321;
                                                                                                                                                                                                                                                                                                                                                                                               STRAIN=A/swine/Cotes d'Armor/799/00(H1N2);
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NCBI_TaxID=197911;
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Similarity 100.0%; I
7; Conservative 0;
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Mismatches
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Best Local Similarity
Matches 7; Conserv
Query Match 5.1%; Score 7; 1
Best Local Similarity 100.0%; Pred. No.
Matches 7; Conservative 0; Mismatci
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EMBL; U49484; AAB50996.1; -.
InterPro; IPR000968; Flu_NS2.
Pfam; PF00601; Flu_NS2; 1.
                                                                                                                                                                                                                                 STRAIN=A/Equine/Prague/1/56;
MEDLINE=97048087; PubMed=8892928;
                                                                                                                                                                                                                                                                                                                 Viruses; ssRNA negative-strand Influenza A viruses.
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MEDLINE=97048087; PubMed=8892928;
                                                                                                                                                                                                   Webster R.G.;
                                                                                                                                                                                                                                                                                                NCBI_TaxID=197911;
                                                                                                                                                                                                                                                                                                                                                                             Nonstructural protein NS2
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                                                                                                          rol. 70:8041-8046(1996).
U49489; AAB51006.1; -.
Pro; IPR000968; Flu NS2.
PF00601; Flu NS2; I.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   112 AA; 13297 MW;
                                                                  112 AA;
                                                                                                                                                                                                                                                                                                                                                                                               (TrEMBLrel. 04, Created)
(TrEMBLrel. 04, Last sequence update)
(TrEMBLrel. 22, Last annotation update)
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(TrEMBLrel. 04, Last sequence up)
(TrEMBLrel. 22, Last annotation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Pr
                                                                  13480 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5.1%;
                                                                                                                                                                                                                                                                                                                                                                             (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Krauss S., Li P.H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 7; DB 12; ; Pred. No. 19; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRT;
                                                                                                                                                                                                                                                                                                                               viruses; Orthomyxoviridae;
 Mismatches
                                                                 45E79AF808E0B650 CRC64;
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                                                                                                                                                                                                               Li P.H.,
                 DB 12;
5. 19;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kawaoka
                                                                                                                                                                                pigs in China.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   pigs in China.";
 0; Indels
                                                                                                                                                                                                                 Kawaoka
                                Length 112;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 112;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CRC64
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009686
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009688
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 Query Match
Best Local Similarity
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                NON_TER
NON_TER
SEQUENCE
                                                                                                                                Webster R.G.;
Webster R.G.;
"Emergence of avian H1N1 influenza
J. Virol. 70:8041-8046(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     009688;
                                                                                                                                                                                                                                                                                                                                                                01-JUL-1997 (TrEMBLrel. 04, Created)
01-JUL-1997 (TrEMBLrel. 04, Last sequence update)
01-JUL-1997 (TrEMBLrel. 22, Last annotation update)
Nonstructural protein NS2 (Fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NON_TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pfam;
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01-UIL-1997 (TYEMBLrel. 04, Last sequence update)
01-CCT-2002 (TYEMBLrel. 22, Last annotation update)
Nonstructural protein NS2 (Fragment).
                                                                                            EMBL; U49486; AAB51000.1; -.
InterPro; IPR000968; Flu NS2.
Pfam; PF00601; Flu NS2; I.
                                                                                                                                                                                              STRAIN=A/Equine/London/1416/73;
MEDLINE=97048087; PubMed=8892928;
Guan Y., Shortridge K.F., Krauss
                                                                                                                                                                                                                                                                                                                                                                                                                                    009686;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    009686
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Webster R.G.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRAIN=A/Equine/Tennessee/5/86;
MEDLINE=97048087; PubMed=8892928;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Influenzavirus A.
Viruses; seRNA negative-strand viruses;
                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                  Influenza A viruses.
                                                                                                                                                                                                                                                                                                                 Viruses; ssRNA negative-strand viruses; Orthomyxoviridae;
                                                                                                                                                                                                                                                                                                                                  Influenzavirus A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL;
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                                                                                                                                                                                                                                                                               NCBI_TaxID=197911;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Emergence of avian H1N1 influenza viruses in pigs in China.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Influenza A viruses.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pro; IPR000968; Flu_NS2.
PF00601; Flu_NS2; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rol. 70:8041-8046(1996).
U49487; AAB51002.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity 7; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QALQLLL 104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Shortridge K.F., Krauss
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112 AA;
                                                 112
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                                                 $
                                            112
; 13308 MW;
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 5.1%;
100.0%;
 Score 7; DB 12;
Pred. No. 19;
                                                   590285174DD7812D CRC64;
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O
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 12;
lo. 19;
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                                                                                                                                                                 pigs in China.";
                 Length 112;
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Query Match
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Q8QLR3;
01-JUN-2002
                                                        Pfam; PFO
NON_TER
NON_TER
SEQUENCE
                                                                                                                                           J. Virol. 70:8041-8046(1996).
EMBL, U49492; AAB51012.1; -
InterPro, IPR000968; Flu.NS2.
Pfam; PF00601; Flu_NS2; I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             009698;
01-JUL-1997
                                                                                                                                                                                                                                                                                                                                                STRAIN=A/Duck/Hong Kong/717/79;
MEDLINE=97048087; PubMed=8892928;
                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-JUL-1997
01-OCT-2002
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Foni E., Barigazzi G., Lin Y., Hay A.,
"Antigenic and genetic diversity among
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Non structural protein NS2.
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01-OCT-2002
                                                                                                                                                                                                                                                                                          Webster R.G.;
                                                                                                                                                                                                                                                                                                                     Guan Y., Shortridge K.F.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Influenzavirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nonstructural
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 InterPro; IPR000968; Flu NS2.
Pfam; PF00601; Flu NS2; 1.
NON TER 113 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Influenza A viruses.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Viruses; ssRNA negative-strand viruses; Orthomyxoviridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL; AJ344041; CAC86660.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    viruses in Europe.";
J. Gen. Virol. 83:735-745(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE=21904432; PubMed=11907321;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRAIN=A/swine/Cotes d'Armor/1121/00(H1N1);
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NCBI_TaxID=161497;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Viruses; ssRNA negative-strand viruses; Orthomyxoviridae; Influenza A viruses; Influenzavirus A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Influenza A virus (A/swine/Cotes d'Armor/1121/00(H1N1)).
                                                                                                                                                                                                                                                            Emergence of avian H1N1 influenza
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    113 AA,
                                                           114 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (TrEMBLrel. 21, Created)
(TrEMBLrel. 21, Last sequence update)
(TrEMBLrel. 22, Last annotation update)
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(TrEMBLrel. 04, Last sequ
(TrEMBLrel. 22, Last anno
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                                                           13440 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5.1%; Score 7;
100.0%; Pred. No.
     5.18;
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                                                                                                                                                                                                                                                                                                                     Krauss
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Last sequence update)
Last annotation updat
     Score 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRT;
                                                           F49CDA3C07E2D005 CRC64;
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5. 19;
     DB 12;
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  Length 114;
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Matches 7; Conserv
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Best Local
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NON_TER
SEQUENCE
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                                NON TER
                                                                                                                                                                                                                                                                                       STRAIN=A/Chicken/Hong Kong/G9/97;
MEDLINE=99362763; PubMed=10430948;
                                                                                                                                                                                                                                                                                                                                                                                                                                   Influenza A virus (A/Chicken/Hong Kong/G9/97(H9N2)).
Viruses; ssRNA negative-strand viruses; Orthomyxoviridae;
Influenza A viruses; Influenzavirus A.
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01-WAY-2000 (TrEMBLrel. 13, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
Nonstructural protein 2 (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL; AJ316046; CAC87385.1; -
InterPro; IPR000968; Flu_NS2.
Pfam; PF00601; Flu_NS2; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Influenza A virus (A/swine/Cotes d'Armor/1122/00(H1N2)).
Viruses; ssRNA negative-strand viruses; Orthomyxoviridae;
Influenza A viruses; Influenzavirus A.
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01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
01-JCT-2002 (TrEMBLrel. 22, Last annotation updat
Non structural protein 2 (Fragment).
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                                                                             EMBL; AF156472; AAD52934.2; -
InterPro; IPR000968; Flu_NS2.
Pfam; PF00601; Flu_NS2; I.
                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MRDLINE-21904432; PubMed-11907321;
Marozin S., Gregory V., Cameron K.,
Foni E., Barigazzi G., Lin Y., Hay
"Antigenic and genetic diversity an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q8QLZ1;
01-JUN-2002
     SEQUENCE
                                                                                                                                                                                                          donors
                                                                                                                                                                                                                                                               Guan Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRAIN=A/swine/Cotes d'Armor/1122/00(H1N2);
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NCBI_TaxID=169172;
                                                                                                                                                                            Proc.
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                                                                                                                                                                   Y., Shortridge K.F., Krauss S., Webster R.G.;
cular Characterization of H9N2 influenza viruses:
s of the 'internal' genes of H5N1 viruses in Hong
Natl. Acad. Sci. U.S.A. 96:9363-9367(1999).
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Virol. 83:735-745(2002).
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115 AA;
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ilarity 100.0%;
Conservative
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                                115
     13648 MW;
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     CD12CB7123A30584 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             mismatches
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Matches 7
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Q8QLT8;
01-JUN-2002
01-JUN-2002
01-MAR-2003
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01-JUL-1997
01-OCT-2002
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J. Gen. Virol. 83:735-745(2002).
EMBL; AJ344024; CAC86661.1; -.
InterPro; IPR000256; Flu_NS1.
InterPro; IPR000968; Flu NS2.
                                                                                                                           STRAIN=A/Goose/Hong Kong/8/76;
MEDLINE=97048087; PubMed=8892928;
Guan Y., Shortridge K.F., Krauss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pfam; PF00600; Flu_NS1; 1.
Pfam; PF00601; Flu_NS2; 1.
NON_TER 116 116
J. Virol. 70:8041-8046(1996).

EMBL; U49495; AAB51018.1; -.

InterPro; IPR000256; Flu_NS1.

InterPro; IPR000968; Flu_NS2.
                                                                                                                                                                                                                                                             Viruses; ssRNA negative-strand Influenza A viruses.
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"Antigenic and genetic diversity among swine influenza A H1N1 and H1N2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRAIN=A/swine/Italy/1523/98(H3N2);
MEDLINE=21904432; PubMed=11907321;
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                                                                                                                                                                                                                                                                                                                                                    Nonstructural
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                                                                                                             Webster R.G.;
                                                                                      Emergence of avian H1N1 influenza viruses
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JUN-2002 (TrEMBLrel. 21, Last sequence update)
MAR-2003 (TrEMBLrel. 23, Last annotation update)
structural protein 2 (Fragment).
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                                                                                                                                                                                                                                                                                                                                                                 (TrEMBLrel. 04, Created)
(TrEMBLrel. 04, Last sequence update)
(TrEMBLrel. 05, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRELIMINARY;
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tive 0;
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                                                                                                                                                                                                                                                                                    viruses;
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19;
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STRAIN=A/Chicken/Hong Kong/G23/97;

RX MEDLINE=99362763; PubMed=10430948;
Guan Y., Shortridge K.F., Krauss S., Webster R.G.;
RT "Molecular characterization of H9N2 influenza viruses: wer.
RT donors of the 'internal' genes of H5N1 viruses in Hong Kong.
RI Proc. Natl. Acad. Sci. U.S.A. 96:9363-9367(1999).

RMEL; AF156473; AAD52936.2; --.
DR InterPro; IPR000958; Flu NS2.
DR Pfam; PF00601; Flu_NS2; T.

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Q SPORTER 11"
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O900G6;
O1-MAY-2000 (TrEMBLrel. 1:
O1-MAY-2000 (TrEMBLrel. 1:
O1-DEC-2001 (TrEMBLrel. 1:
Nonstructural protein 2 ()
                                                                                                                                                                                                                                                                                                                                           Q9Q0E4
Q9Q0E4;
01-MAY-2000
01-MAY-2000
01-DEC-2001
                     MEDLINE=99362763; PubMed=10430948;
Guan Y., Shortridge K.F., Krauss S., Webster R.G.;
"Molecular characterization of H9N2 influenza viruses:
donors of the 'internal' genes of H5N1 viruses in Hong
Proc. Natl Acad. Sci. U.S.A. 96:9363-9367(1999).
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Pfam; PF00601; Flu NS2; 1.
NON TER 116 116
SEQUENCE 116 AA; 13711
                                                                                                                                SEQUENCE FROM N.A.
STRAIN=A/Quail/Arkansas/29209-1/93;
                                                                                                                                                                                                                           Influenza A virus (A/Quail/Arkansas/29209-1/93 (H9N2)).
Viruses; ssRNA negative-strand viruses; Orthomyxovirida
Influenza A viruses; Influenzavirus A.
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Viruses; ssRNA negative-strand viruses; Orthomyxovir
Influenza A viruses; Influenzavirus A.
  EMBL; AF156484; AAD52958.2;
                                                                                                                                                                                                                                                                                                                     Nonstructural protein
                                                                                                                                                                                                   NCBI_TaxID=97395;
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                                                                                                                                                                                                                                                                                                                                             (TrEMBLrel.
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009694;
01-JUL-1997
01-JUL-1997
01-OCT-2002
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01-JUL-1997
01-OCT-2002
                                                                                                                      Influenzavirus A.
Viruses; ssRNA negative-strand viruses; Orthomyxoviridae;
Influenza A viruses.
NCBI_TaxID=197911;
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Pfam; PP00601; Flu_NS2; I.
NON_TER 1
NON_TER 118 118
SEQUENCE 118 AA; 13999 MW.
                                      STRAIN=A/Swine/Hong Kong/273/94; MEDLINE=97048087; PubMed=8892928; Guan Y., Shortridge K.F., Krauss
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                       Guan Y., Shor
Webster R.G.;
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STRAIN=A/Duck/Hong Kong/193/77;
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InterPro; IPR000968; Flu_NS2.
Pfam; PF00600; Flu_NS1; I.
Pfam; PF00601; Flu_NS2; I.
Pfam; PF00601; Flu_NS2; I.
NON_TER 118 118
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7; Conservative
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Shortridge K.F., Krauss
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  of avian
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(TrEMBLrel. 04, Last sequence update)
(TrEMBLrel. 22, Last annotation update)
al protein NS2 (Fragment).
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13999 MW;
    H1N1 influenza
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Q9Q0G4;
STRAIN=A/Chicken/Beijing/1/94;
MEDLINE=99362763; PubMed=10430948;
Guan Y., Shortridge K.F., Krauss S., Webster R.G.;
"Molecular characterization of H9N2 influenza viruses:
                                                                                                                                           Influenza A virus (A/Chicken/Beijing/1/94(H9N2)).
Viruses; ssRNA negative-strand viruses; Orthomyxoviridae;
Influenza A viruses; Influenzavirus A.
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"Molecular characterization of HNN2 influenza viruses:
donors of the 'internal' genes of H5N1 viruses in Hong
Proc. Natl. Acad. Sci. U.S.A. 96:9363-9367(1999).
EMBL; AF156474; AAD52938.2; -.
InterPro; IPR000968; Flu NS2.
Pfam; PF00601; Flu_NS2; 1.
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Influenza A virus (A/Pigeon/Hong Kong/Y233/97(H9N2)).
Viruses; ssRNA negative-strand viruses; Orthomyxoviri
Influenza A viruses; Influenzavirus A.
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InterPro; IPR000968; Flu NS2.
Pfam; PF00601; Flu NS2; I.
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                                                                                   SEQUENCE FROM N.A.
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MEDLINE=99362763; PubMed=10430948;
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RESULT 46
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AC Q9INP
AC Q9INP
AC Q9INP
DT 01-QC
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DE NOIST
GN NS2:
OS Influ
OC Virus
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RN SEQUE
RC STRAI
RX MEDLI
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RT INTEX
RA CHOC
RT INTEX
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DR EMBL;
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Q9Q0F8;
01-MAY-2000
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MEDLINE=20231940; PubMed=10769072;
Hiromoto Y., Yamazaki Y., Fukushima T.,
Omoe K., Nerome R., Lim W., Sugita S., ?
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01-OCT-2000 (TrEMBLrel. 15,
01-OCT-2000 (TrEMBLrel. 15,
01-JUN-2001 (TrEMBLrel. 17,
STRAIN=A/Quail/Hong Kong/G1/97;
MEDLINE=99362763; PubMed=10430948;
Guan Y. Shortridge K.F., Krauss S., Webster R.G.;
"Molecular characterization of H9N2 influenza viruses: were they the
                                                                                                                                                 01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
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EMBL; AF115288; AAF75116.1; -.
InterPro; IPR000968; Flu NS2.
Pfam; PF00601; Flu NS2; I.
SEQUENCE 119 AA; 14088 MW; BOCJ
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EMBL; AF156480; AAD52950.2; -.
InterPro; IPR000968; Flu.NS2.
                                                   SEQUENCE FROM N.A.
                                                                                                Influenza A virus (A/Quail/Hong Kong/G1/97 (H9N2)).
Viruses; ssRNA negative-strand viruses; Orthomyxovi
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SEQUENCE FROM N.A.
STRAIN=A/Duck/Hong Kong/Y280/97;
STRAIN=99362763; PubMed=10430948;
Guan Y., Shortridge K.F., Krauss S.,
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MEDLINE-99362763; PubMed=10430948;
Guan Y., Shortridge K.F., Krauss S., Webster R.G.;
"Molecular characterization of H9N2 influenza viruses:
donors of the 'internal' genes of H5N1 viruses in Hong
Proc. Natl. Acad. Sci. U.S.A. 96:9363-9367(1999).

EMBL; AF156479; AAD52948.2; -.
InterPro; IPR000968; Flu NS2:
Pfam; PF00601; Flu NS2; I.
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Proc. Natl. Acad. Sci. U.S.A. 96:9363-9367(1999).
EMBL; AP156477; AAD52944.2; -.
InterPro; IPR000968; Plu_NS2.
Pfam; PF00601; Plu_NS2; I.
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
Nonstructural protein 2 (Fragment).
                                                                                                                        Influenza A viruses;
NCBI_TaxID=97350;
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Viruses; sBRNA negative-strand viruses; Orthomyxov
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Viruses; ssRNA negative-strand viruses; Orthomyxovir
Influenza A viruses; Influenzavirus A.
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119 AA; 14119 MW; D42710049DE8932A CRC64;
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01-MAY-2000
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STRAIN=A/Chicken/Korea/38349-P96323/96;

MEDLINE=99362763; PubMed=10430948;

Guan Y., Shortridge K.F., Krauss S., Webster R.G.;

"Molecular characterization of H9N2 influenza viruses: were they the donors of the 'internal' genes of H5N1 viruses in Hong Kong?",

Proc. Natl. Acad. Sci. U.S.A. 96:9363-9367(1999).

EMBL; AF156481; AAD52952.2; -.

InterPro; IPR000968; Flu_NS2.

Pfam; PF00601; Flu_NS2; I.

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SEQUENCE 119 AA; 14064 MW; 2CAC829D1323117F CRC64;
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Viruses; ssRNA negative-strand viruses; Orthomyxoviridae;
Influenza A viruses; Influenzavirus A.
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Nonstructural protein 2 (Fragment).
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Mouse lymphotoxinHuman secreted pro
Listeria monocytog
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S. pneumoniae type
Streptococcus pneu
Ketoacyl ACP synth

Human RP105 protei

Human B-cell activ

prosophila melanog Drosophila melanog Lactococcus lactis E. coli proliferat Ramoplanin biosynt Drosophila melanog

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Peptide #1530 Peptide #1582 Peptide #1515

enco enco enco

Human

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Protein #1523 enco brain

ALIGNMENTS

Drosophila melanog Photorhabdus lumin Toxin TcbAii, enco Drosophila melanog

Photorhabdus lumin Toxin TcbA, encode

Novel human diagno Human receptors an Novel human diagno Herbicidally activ B cell surface I Novel human diag Human receptors

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kinase polyp hexokinase 5

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein in an individual and thus inhibiting the thrombotic events associated with cancer; promoting spermatogenesis, modulating seminal fluid viscosity, enhancing viability of cryopreserved sperm, sperm motility and fertilisation; and as antigenic peptides to generate antibodies. Zcys8 is useful as research reagent for characterising si
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel isolated mammalian cystatin-8 polypeptide useful for promoting spermatogenesis, and inhibiting cancer procoagulant protein which leads to inhibition of thrombotic events associated with cancer -
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                                                                                                                                                                                                                                                                                    Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 2; Page 93-94; 100pp; English.
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N-PSDB; ABK49522.
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                       121
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                                                                                                                                                                                                                              Similarity
VPWFEQYKILNKSCSSD
                                                                                 KYHFRIFRVLKVQRQVTDHLEYHLNVEMQWTTCQKFETTNCVPQERELHKQVNCFFSVFA 120
                                                                                                                                                           MAEPWQALQLLLAILLTLMALPYQARKKTFLSVHEVMAVENYAKDSLQWITDQYNKESDD 60
                                                          KYHFRI FRVLKVQRQVTDHLEYHLNVEMQWTTCQKPETTNCVPQERELHKQVNCFFSVFA
                                                                                                                                  MAEPWQALQLLLAILLTLMALPYQARKKTFLSVHEVMAVENYAKDSLQWITDQYNKESDD
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                                                                                                                                                                                                                            100.0%; Score 137; DB 23; 100.0%; Pred. No. 8.6e-132;
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ARRESULT 2
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JID AAU79854
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention describes an isolated mammalian cystatin-8 (Zcys8)
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                                                                                                                                                                                                                                                                                                                                                                                                              This sequence represents an antigenic fragment of human cystatin-8 (Zcys8).
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                                                                                    21
                                                                            LPYQARKKTFLSVHEVMAVENYAKDSLQWITDQYNKESDDKYHFRIFRVLKVQRQVTDHL
    LPYQARKKTFLSVHEVMAVENYAKDSLQWITDQYNKESDDKYHFRIFRVLKVQRQVTDHL
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                                                                                                                                                                     Conservative
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Pred. No.
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EYHLNVEMQWTTCQKPETTNCVPQERELHKQVNCFFSVFAVPWFEQYKILNKSCSSD 137

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QYNKESDDKYHFRI FRVLKVQRQVTDHLBYHLNVEMQWTTCQKPETTNCVPQERELHKQV QYNKESDDKYHFRIFRVLKVQRQVTDHLEYHLAVEMQWTTCQKFETTNCVPQERELHKQV

60

Query Match
Best Local Similarity
Matches 80; Conserv

Conservative

0,

Score 80; DB Pred. No. 8.2 0; Mismatches

DB 23; 1 8.2e-74; 0

Length Indels

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Gaps

0

58.4%;

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The invention describes an isolated mammalian cystatin-8 (2cys8)

CC polypeptide (I). (I) is useful for: inhibiting cancer procoagulant

CC protein in an individual and thus inhibiting the thrombotic events

CC associated with cancer; promoting spermatogenesis, modulating seminal

CC fluid viscosity, enhancing viability of cryopreserved sperm, sperm

CC motility and fertilisation; and as antigenic peptides to generate

CC antibodies. Zcys8 is useful as research reagent for characterising sites

CC enhancing fertilisation during assisted reproduction in humans and in

CC enhancing fertilisation during assisted reproduction in humans and in

CC enhancing fertilisation during assisted reproduction in humans and in

CC enhancing fertilisation and provided the core production in humans and in

CC entropy and autopsy material in vitro for the

CC presence of Zcys8; The antibodies are also useful to isolate large

CC quantities of Zcys8 protein and DNA sequences that encode Zcys8 genes.

CC The polymucleotide encoding (I) is useful to detect and to localise the

CC copy mucleotide probes are useful for in vivo diagnosis. The

CC copy number chances insertions deleterions restriction whether a subject's

CC copy number chances insertions a felerions restriction and serves and
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Best Local Sim
Matches 115;
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                                                                                                                                        Sequence
                                                                                                                                                                                                              copy number changes, insertions, deletions, restriction site changes and rearrangements and genetic alterations that inactivate the Zcys8 gene.
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                                                                                                                                                                                         This sequence represents an antigenic
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                                                                                    Similarity
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                                                                                                                                        115 AA;
                                                                   Conservative
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Pred. No.
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                                                                                                                                                                                         fragment
                                                                                  2.1e-109;
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ARESULT 4
AAU79865
ID AAU79867
AC AAU7
AC Cyst
Cyst
KW Sper
KW
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                                                                                                The invention describes an isolated mammalian cystatin-8 (Zcys8)
CC polypeptide (I). (I) is useful for: inhibiting cancer procoagulant
CC protein in an individual and thus inhibiting the thrombotic events
CC associated with cancer; promoting spermatogenests, modulating seminal
CC motility and fertilisation; and as antigenic peptides to generate
CC antibodies. Zcys8 is useful as research reagent for characterising sites
CC of interaction between Zcys8 and its receptor. Zcys8 is useful in
CC enhancing fertilisation during assisted reproduction in humans and in
CC enhancing fertilisation during assisted reproduction in humans and in
CC enhancing fertilisation during assisted reproduction in humans and in
CC enhancing fertilisation during assisted reproduction in humans and in
CC enhancing fertilisation and in sectual to screen biological samples like
Diood, urine, saliva, tissue biopsy and autopsy material in vitro for the
CC presence of Zcys8. The antibodies are also useful to isolate large
CC useful titles of Zcys8 protein and DNA sequences that encode Zcys8 genes.
CC The polynucleotide encoding (I) is useful to detect and to localise the
CC copy number changes, insertions, deletions, restriction site changes and
CC copy number changes, insertions, deletions, restriction site changes and
CC rearrangements and genetic alterations that inactivate the Zcys8 gene.
CC This sequence represents an antigenic peptide of human cystatin-8
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    Sequence
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113

NCFFSVFAVPWFEQYKILNK 132

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74 RQVTDHLEYHLNVEMQWTTCQKPETTNCVPQERELHKQVNCFFSVFAVPWFEQYKILNK 132
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뮍 5

Matches Query Match Best Local

Conservative

0

Mismatches

0

0

100.0%; 38.0%;

Score 52; Pred. No.

DB 23; 2.2e-45;

Length Indels

56 52 Similarity

KESDDKYHFRIFRVLKVQRQVTDHLEYHLNVEMQWTTCQKPETTNCVPQERE 107 KESDDKYHFRIFRVLKVQRQVTDHLEYHLNVEMQWTTCQKPETTNCVPQERE 52

Sequence

52

Ä

quantities of Zcy88 protein and DNA sequences that encode Zcy88 genes. The polynucleotide encoding (I) is useful to detect and to localise the expression of a Zcy88 gene in a biological sample and Zcy88 oligonucleotide probes are useful for in vivo diagnosis. The polynucleotide encoding (I) is useful in determining whether a subject's chromosomes contain a mutation in the Zcy88 gene like aneuploidy, gene copy number changes, insertions, deletions, restriction site changes and rearrangements and genetic alterations that inactivate the Zcy88 gene.

This sequence represents an antigenic peptide of human cystatin-8 (Zcys8).

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   Matches
                  Query Match
Best Local (
                                                                                                                    polynucleotide encoding (I) is useful in determining whether a subject's chromosomes contain a mutation in the Zays8 gene like aneuploidy, gene copy number changes, insertions, deletions, restriction site changes and rearrangements and genetic alterations that inactivate the Zoys8 gene. This sequence represents an antigenic peptide of human cystatin-8
                                                                                                                                                                                                          animals. Anti-(1) antibodies are useful to screen biological samples like blood, urine, saliva, tissue biopsy and autopsy material in vitro for the presence of Zcys8. The antibodies are also useful to isolate large quantities of Zcys8 protein and DNA sequences that encode Zcys8 genes. The polynucleotide encoding (1) is useful to detect and to localise the expression of a Zcys8 gene in a biological sample and Zcys8 oligonucleotide probes are useful for in vivo diagnosis. The
                                                                                                                                                                                                                                                                                                                                   protein in an individual and thus inhibiting the thrombotic events associated with cancer; promoting spermatogenesis, modulating seminal fluid viscosity, enhancing viability of cryopreserved sperm, sperm motility and fertilisation; and as antigenic peptides to generate antibodies. Zcys8 is useful as research reagent for characterising sites of interaction between Zcys8 and its receptor. Zcy88 is useful in enhancing fertilisation during assisted reproduction in humans and in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel isolated mammalian cystatin-8 polypeptide useful for promoting spermatogenesis, and inhibiting cancer procoagulant protein which leads to inhibition of thrombotic events associated with cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cystatin-8; Zcys8; cancer; procoagulant protein; thrombosis; spermatogenesis; seminal fluid viscosity; cryopreserved sperm; sperm motility; fertilisation; antigenic peptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention describes an isolated mammalian cystatin-8 (Zcys8) polypeptide (I) (I) is useful for: inhibiting cancer procoagula
                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 2; Page 99; 100pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Holloway
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-SEP-2000; 2000US-230230P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human cystatin-8 (Zcys8) antigenic fragment #14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAU79866 standard; Peptide; 59
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                                                                                                        (Zcys8)
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                    Similarity
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                  Score 59;
Pred. No.
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 Mismatches
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1.7e-52;
0;
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Indels
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Gaps
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RESULT 6
AAU79864
ID 78864
ID 89864
ID 
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                                                                                                                                                                                                                                                                                                                                                                                                                                    fluid viscosity, enhancing viability of cryopreserved sperm, sperm motility and fertilisation; and as antigenic peptides to generate antibodies. Zcys8 is useful as research reagent for characterising sites of interaction between Zcys8 and its receptor. Zcys8 is useful in enhancing fertilisation during assisted reproduction in humans and in animals. Anti-(I) antibodies are useful to screen biological samples like blood, urine, saliva, tissue biopsy and autopsy material in vitro for the presence of Zcys8. The antibodies are also useful to isolate large
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel isolated mammalian cystatin-8 polypeptide useful for promoting spermatogenesis, and inhibiting cancer procoagulant protein which leads to inhibition of thrombotic events associated with cancer -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cystatin-8; Zcys8; cancer; procoagulant protein; thrombosis; spermatogenesis; seminal fluid viscosity; cryopreserved sperm; sperm motility; fertilisation; antigenic peptide.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           associated with cancer; promoting spermatogenesis, modulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               polypeptide (I).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention describes an isolated mammalian cystatin-8 (Zcys8)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 2; Page 98; 100pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2002-383044/41.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15-JUL-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ide (I). (I) is useful for: inhibiting cancer procoagulant
in an individual and thus inhibiting the thrombotic events
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
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RESULT 8
ABB28913
ID ABB2
XX
AC ABB2
XX
DT 01-F
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ABG48915
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Best Local :
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26-MAY-2000; 2000US-0207456.
30-JUN-2000; 2000US-0608408.
03-AUG-2000; 2000US-0632366.
21-SEP-2000; 2000US-0234687.
27-SEP-2000; 2000US-0234635.
04-OCT-2000; 2000GB-0024263.
                                                                                                                                                                                                                                                                                      The invention relates to a single exon nucleic acid probe (SENP) (I) for measuring human gene expression in a sample derived from human adult liver, comprising one of 13109 defined nucleotide sequences given in the specification (or complements) fragments). The probe hybridises at high stringency to a nucleic acid molecule expressed in the human adult liver. (I) may be used for predicting, measuring and displaying gene expression in samples derived from human adult liver. The genes identified may be involved in genetic liver diseases such as cirrhosis, hyperlipoproteinaemia, hyperlipidaemia and hypercholesterolaemia which is associated with coronary heart disease. AB647348-AB65930 represent human liver single exon encoded poptides of the invention. Note: The sequence information for this patent does not appear in the printed specification but was obtained in electronic format directly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human genome-derived single exon nucleic acid probes useful for analysing gene expression in human adult liver -
   01-FEB-2002
                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 27; SEQ ID No 27563; 658pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2001-488898/53.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         30-JAN-2001; 2001WO-US00664.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; liver; cirrhosis; hyperlipoproteinaemia; hyperlipidaemia;
hypercholesterolaemia; coronary heart disease.
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                             ABB28913;
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                                                          ABB28913 standard; Peptide;
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                                                                                                                                                                                         50;
                                                                                                                                                                                                        Similarity
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                                                                                                                                                RKKTFLSVHEVMAVENYAKDSLQWITDQYNKESDDKYHFRIFRVLKVQRQ 75
                                                                                                                                  RKKTFLSVHEVMAVENYAKDSLQWITDQYNKESDDKYHFRIFRVLKVQRQ
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                                                                                                                                                                                                                                                   50 AA;
                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                             ftp.wipo.int/pub/published_pct_sequences.
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 (first entry)
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Pred. No.
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                                                                                                                                                                                          Mismatches
                                                                                                                                                                                         2.3e-43;
hes 0;
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RESULT 9
ABB32389
ID ABB3
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26-MAY-2000; 2000US-0207456.

30-JUN-2000; 2000US-0608408.

03-AUG-2000; 2000US-0632366.

21-SEP-2000; 2000US-0234687.

27-SEP-2000; 2000US-0236359.

04-OCT-2000; 2000GB-0024263.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       the probes with a collection or detection. The probes are useful for derived from mRNA of human breast, and then measuring the label bound to each probe of the microarray. The probes are useful for verifying the expression of regions of genomic DNA predicted to encode proteins. They are useful for gene discovery, and for determining predisposition and/or prognosing breast disease. Gene expression analysis is useful for assessing the toxicity of chemical expression analysis is useful for assessing the toxicity of chemical agents on cells. The microarray of this invention presents a far greater agents on cells. The microarray of this invention presents a less bias
                                                                                                                                                                                                                                                                                                                                                                                                                                      agents on cells. The microarray of this invention presents a far grudiversity of probes for measuring gene expression, with far less bithan expressed sequence tag microarrays. The method is suitable for rapid production of functional information from genomic sequence. The present sequence is a peptide encoded by a single exon nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New spatially-addressable set of single exon nucleic acid probes, useful for measuring gene expression in sample derived from human breast, comprises number of single exon nucleic acid probes -
                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                      probe of the invention.

Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format direfrom WIPO at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              from human breast and BT 474 cells. The method involves contacting the probes with a collection of detectably labelled nucleic acids derived from mRNA of human breast, and then measuring the label
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Penn SG,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; microarray; single exon probe; gene expression; breast
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Peptide #1564 encoded by breast cell single exon nucleic acid probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to a spatially-addressable set of single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 27; SEQ ID NO 11881; 327pp + sequence listing; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (MOLE-) MOLECULAR DYNAMICS INC.
                                                                                                                                                                                                   26 RKKTFLSVHEVMAVENYAKDSLQWITDQYNKESDDKYHFRIFRVLKVQRQ 75
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                                                                                                                                                                                                                                                   0;
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Rank DR;
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                                                                                                                                                                                                                                                                        DB 22; I
. 2.3e-43;
                                                                                                                                                                                                                                                                                           Length 50;
                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                        format directly
                                                                                                                                                                                      50
                                                                                                                                                                                                                                                         0;
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                                                                                                                                                                                                                                                           Gaps
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01-FEB-2002

(first entry)

ABB32389;

ABB32389

standard; Peptide; 50

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RESULT 10
ABB34086
ID ABB34
XX
AC ABB34
XX
DT 04-FE
XX
DE Pepti
                                                                                                                                                                                                                                                                                                                                 S
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                                                                                                                                                                                                                                                                                                                                                   The invention relates to a spatially-addressable set of single exon CC nucleic acid probes for measuring gene expression in a sample derived CC from human breast and BT 474 cells. The method involves contacting CC the probes with a collection of detectably labelled nucleic acids CC derived from mRNA of human breast, and then measuring the label CC bound to each probe of the microarray. The probes are useful for cells tying the expression of regions of genomic DNA predicted to CC encode proteins. They are useful for gene discovery, and for CC determining predisposition and/or prognosing breast disease. Gene CC expression analysis is useful for assessing the toxicity of chemical CC agents on cells. The microarray of this invention presents a far greater CC diversity of probes for measuring gene expression, with far less bias CC than expressed sequence tag microarrays. The method is suitable for CC rapid production of functional information from genomic sequence. The CC probe of the invention.

CC Note: The sequence data for this patent did not form part of the CC printed specification, but was obtained in electronic format directly CC from WIPO at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 50; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-FEB-2000; 2000US-0180312.
26-MAY-2000; 2000US-0207456.
30-JUN-2000; 2000US-0608408.
03-AUG-2000; 2000US-0632366.
21-SEP-2000; 2000US-0234687.
27-SEP-2000; 2000US-0236559.
04-OCT-2000; 2000GB-0024263.
Peptide #1592 encoded by human foetal liver single exon probe.
                                     04-FEB-2002
                                                                      ABB34086;
                                                                                                      ABB34086 standard; Peptide;
                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 27; SEQ ID NO 15357; 327pp + sequence listing; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New spatially-addressable set of single exon nucleic acid probes, useful for measuring gene expression in sample derived from human breast, comprises number of single exon nucleic acid probes -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2001-496933/54.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-JAN-2001; 2001WO-US00662
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          disease; cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; microarray;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Peptide #5040 encoded
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (MOLE-)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULAR DYNAMICS INC
                                                                                                                                                                                         RKKTFLSVHEVMAVENYAKDSLQWITDQYNKESDDKYHFRIFRVLKVQRQ 50
                                                                                                                                                                                                              RKKTFLSVHEVMAVENYAKDSLQWITDQYNKESDDKYHFRIFRVLKVQRQ 75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hanzel
                                                                                                                                                                                                                                                                                                                              50 AA;
                                                                                                                                                                                                                                                              Conservative
                                   (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        single exon probe;
                                                                                                                                                                                                                                                                            36.5%; Score 50;
100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chen W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          by breast cell single exon nucleic acid probe.
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                                                                                                                                                                                                                                                                          DB 22; I
2.3e-43;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        expression; breast
                                                                                                                                                                                                                                                            0,
                                                                                                                                                                                                                                                                                          Length 50;
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30-JAN-2001; 2001WO-US00666

09-AUG-2001.

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RESULT 11
ABB19524
ID ABB19
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Best Local :
                                                            Human; gene expression; heart; microarray; vascular system; cardiovascular disease; hypertension; cardiac arrhythmia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to a single exon nucleic acid probe for measuring human gene expression in a sample derived from human foetal liver. The single exon nucleic acid probes may be used for predicting, measuring and displaying gene expression in samples derived from human fetal liver. The present sequence is a peptide encoded by a single exor nucleic acid probe of the invention. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.
Homo sapiens
                                        congenital heart disease.
                                                                                                                                                                             23-JAN-2002
                                                                                                                                                                                                                                                              ABB19524 standard; Protein;
                                                                                                                                Protein #1523 encoded by probe for measuring heart cell gene
                                                                                                                                                                                                                        ABB19524;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 27; SEQ ID NO 26721; 639pp + sequence listing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human genome-derived single exon nucleic acid probes useful for analyzing gene expression in human fetal liver -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Penn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27-SEP-2000;
04-OCT-2000;
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21-SEP-2000;
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30-JUN-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; foetal liver; gene expression; single exon nucleic acid probe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sg,
                                                                                                                                                                                                                                                                                                                                                                                                   26 RKKTFLSVHEVMAVENYAKDSLQWITDQYNKESDDKYHFRIFRVLKVQRQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                             50;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   50 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ilarity 100.0%;
Conservative (
                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2000US-0608408.
2000US-0632366.
2000US-0234687.
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2000GB-0024263.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2000US-0207456.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        36.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      ٥,
                                                                                                                                                                                                                                                                50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 50;
Pred. No.
                                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 22;
2.3e-43;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               encoded by a single exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
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                                                                                                                              expression.
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RESULT 12
AAM54871
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Best Local S
Matches 50
         04-FEB-2000;
26-MAY-2000;
30-JUN-2000;
03-AUG-2000;
21-SEP-2000;
27-SEP-2000;
04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      04-FEB-2000;
26-MAY-2000;
30-JUN-2000;
03-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present invention relates to single exon nucleic acid probes for measuring human gene expression in a sample derived from human heart (see ABA21335-ABA41305). The present sequence is a protein encoded by one such probe. The probes may be used for predicting, measuring and displaying gene expression in samples derived from the human heart via microarrays. By measuring gene expression, the probes are useful for predicting, diagnosing, grading, staging, monitoring and prognosing diseases of the human heart and vascular system e.g. cardiovascular disease, hypertension, cardiac arrhythmias and congenital heart disease. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                Human; brain expressed exon; gene expression analysis; probe; microarray; Alzheimer's disease; multiple sclerosis; schizophrenia;
                                                                                                                                                                                                                                                                     Human brain expressed single exon probe encoded protein SEQ ID NO: 26976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 15;
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27-SEP-2000;
                                                                                                                 30-JAN-2001;
                                                                                                                                         09-AUG-2001.
                                                                                                                                                                  WO200157275-A2
                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                     epilepsy; cancer.
                                                                                                                                                                                                                                                                                                                                                    AAM54871 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Single exon nucleic acid probes for analyzing gene expression in human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Penn
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ftp.wipo.int/pub/published_pct_sequences.
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                                                                                                                                                                                                                                                                                                                                                                                                                                  26 RKKTFLSVHEVMAVENYAKDSLQWITDQYNKESDDKYHFRIFRVLKVQRQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       50;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQ ID No 21294; 530pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hanzel DK,
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; 2000US-0207456.
; 2000US-0608408.
; 2000US-0632366.
; 2000US-0234687.
; 2000US-02346359.
; 2000US-0236359.
         2000US-0180312.
2000US-0207456.
2000US-0608408.
2000US-0632366.
2000US-0234687.
2000US-0234685.
2000US-02346359.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                 2001WO-US00667.
                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                    Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                36.5%;
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Rank DR;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 22; Lc.
3. 2.3e-43;
0;
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AAM67252

AAM67252

AAM67252

AC AAMM

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Best Local S
Matches 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     probes which are derived from genomic sequences expressed in the human brain. They can be used to measure gene expression in brain cell samples, which may enable the diagnosis and improved treatment of nervous system diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia, epilepsy and cancers. The present sequence is a protein encoded by one of the probes of the invention.
                                                                                                                                                              Human
                                                                                                                                                                                                               WPI; 2001-488900/53.
                                                                                                                                                                                                                                                                                                                                                                         21-SEP-2000;
27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                    30-JUN-2000;
03-AUG-2000;
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26-MAY-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     09-AUG-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200157276-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; bone
microarray;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human bone marrow expressed probe encoded protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  06-NOV-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Single
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                                                                                                                                                                                                                                                          SG,
                                                                                                                                      genome-derived single exon nucleic acid probes useful zing gene expression in human bone marrow -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26 RKKTFLSVHEVMAVENYAKDSLQWITDQYNKESDDKYHFRIFRVLKVQRQ
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                                                                                           4.
                                                                                                                                                                                                                                                                                                        MOLECULAR DYNAMICS INC
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                                                                                             SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              50 AA;
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; 2000US-0207456.
; 2000US-0608408.
; 2000US-0632366.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              marrow expressed exon;
cancer; leukaemia; lymp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        invention provides a number of single exon nucleic acid
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                                             invention provides a number of single exon nucleic acid
                                                                                                                                                                                                                                                                                                                                                 ; 2000US-0234687.
; 2000US-0236359.
; 2000GB-0024263.
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ilarity 100.0%;
Conservative (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                entry)
                                                                                             27558; 658pp + Sequence Listing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26976; 650pp + Sequence Listing;
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                                                                                                                                                                                                                                                          Chen W,
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                                                                                                                                                                                                                                                            Rank DR;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            con; gene expression analysis; probe;
lymphoma; myeloma.
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2.3e-43;
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                                                                                             English
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The present invention provides a number of single exon nucleic ac probes which are derived from genomic sequences expressed in the bone marrow. They can be used to measure gene expression in bone

human

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Best Local Similarity
Matches 50; Conserv
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                                                                                                                         The present invention relates to human single exon nucleic acid probes (SENP: see AAI10068-AAI28459). The present sequence is a peptide encoded by one such probe. The SENPs are derived from human HeLa cells. The SENPs can be used to produce a single exon microarray, which can be used for measuring human gene expression in a sample derived from human cervical spithelial cells. By measuring gene expression, the probes are therefore useful in grading and/or staging of diseases of the cervix, notably
                                                                                                                                                                                                                                                                                                                       Penn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               samples, which may enable the improved diagnosis and treatment of cancers such as lymphoma, leukaemia and myeloma. The present sequence is a protein encoded by one of the probes of the invention.
                                                                       Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                            30-JUN-2000;
03-AUG-2000;
                                                     Sequence
                                                                                                                    cervical cancer.
                                                                                                                                                                                                                                  Claim 27;
                                                                                                                                                                                                                                                                                               WPI; 2001-488901/53.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cervical cancer.
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                 Local
                                                                                                                                                                                                                                                                                                                        SG,
                                                                                                                                                                                                                                                        genome-derived single exon nucleic acid probes useful for zing gene expression in human cervical epithelial cells -
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                 Similarity
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2000US-0207456.
; 2000US-0608408.
; 2000US-0632366.
; 2000US-0234587.
; 2000US-0236359.
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ilarity 100.0%;
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36.5%; bu
100.0%; Pr
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               Score 50; pred. No.
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     Mismatches
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               DB 22; I
2.3e-43;
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2.3e-43;
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RESULT 16
AAM02833
ID AAM02
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DT 09-OC
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DB Pepti
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AAM27545
ID AAM27
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention relates to single exon nucleic acid probes (SENP: see AAI31315-AAI57546). The present sequence is a peptide encoded by on such probe. The probes are useful for producing a microarray for predicting, measuring and displaying gene expression in samples derived from human placenta. The probes are useful for antenatal diagnosis of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-JUN-2000;
03-AUG-2000;
21-SEP-2000;
                                                                        09-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                    Peptide #1515 encoded by probe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human
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26-MAY-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  human genetic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        genome-derived single exon nucleic acid probes useful
zing gene expression in human placenta -
                                                                                                                                                                                                                                                                                                                                           26
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                                                                                                                                                                     standard; Protein;
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; 2000US-0234687.
; 2000US-0236359.
; 2000GB-0024263.
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2000US-0207456
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2.3e-43;
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30-JUN-2000;
03-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention relates to novel single exon nucleic acid probes (see AAI00010-AAI10067). The present sequence is a peptide encoded by one such probe. The probes are useful for measuring human gene expression in a human breast sample, where the probe hybridises at high stringency to a nucleic acid expressed in the human breast. The probes are useful for predicting, diagnosing, grading, staging, monitoring and prognosing diseases of the human breast particularly those diseases with polygenic actiology. The diseases include: breast cancer, disorders of development, inflammatory diseases of the breast, fibrocystic changes, proliferative
pulmonary histiocytosis; lymphangioleiomyomtosis; Karapulmonary alveolar proteinosis; fibrocystic pulmonary primary ciliary dyskinesis; pulmonary hypertension;
                               Hermansky-Pudlak syndrome; sarcoidosis; pulmonary haemosiderosis; pulmonary histiocytosis; lymphangioleiomyomtosis; Karagener syndrome; pulmonary alveolar proteinosis; fibrocystic pulmonary dysplasia;
                                                                                                               Human; single exon probe; asthma; lung cancer; COPD; ILD; chronic obstructive pulmonary disease; interstitial lung disease; familial idiopathic pulmonary fibrosis; neurofibromatosis; tuberous sclerosis; Gaucher's disease; Niemann-Pick disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     t disease and non-carcinoma tumours.
The sequence data for this patent did not fication, but was obtained in electronic for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          26 RKKTFLSVHEVMAVENYAKDSLQWITDQYNKESDDKYHFRIFRVLKVQRQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQ ID No 11573; 322pp; English
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2000US-0608408.
2000US-0632366.
2000US-0234687.
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The invention relates to a spatially-addressable set of single exon nucleic acid probes for measuring gene expression in a sample derived from human lung comprising single exon nucleic acid probes having one of 12614 nucleic acid sequences mentioned in the specification, or their complements or the 12387 open reading frames derived from the 12614 probes, hles included are a microarray comprising the novel set of probes which hybridise at high stringency to a collection of detectably labeled nucleic acid expressed in a sample derived from human lung, comprising (a) contacting the array with a collection of detectably labeled nucleic acids derived from human lung a collection of detectably labeled nucleic acids derived from human lung comprising (a) parithmically predicting at least one exon from genomic sequences of the array; identifying exons in a eukaryotic genome, comprising (a) algorithmically predicting at least one exon from genomic sequences of the eukaryote; and (b) detecting specific hybridisation of detectably labeled nucleic acids from eukaryote lung mRNA, to a single exon probe, comprising (a) identifying exons from genomic sequence by the method comprising (a) identifying exons from genomic sequence by the method comprising (a) identifying exons from genomic sequence by the method comprising (a) identifying exons from genomic sequence by the method comprising (a) identifying exons from genomic sequence by the method comprising (a) identifying exons from genomic sequence by the method comprising (a) identifying exons from genomic sequence by the method comprising (a) identifying exons from genomic sequence by the method comprising (a) identifying exons from genomic sequence by the method comprising (a) identifying exons from genomic sequence by the method comprising one of 12011 sequences, mentioned in the specification, or encoded by the probes in nucleic sequence is gene, particularly using human lung derived mRNA and for the study of lung diseases (comprising one particularly in the study of lung
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26-MAY-2000; 2000US-207456P-
30-JUN-2000; 2000US-060840B-
03-AUG-2000; 2000US-0532366-
21-SEP-2000; 2000US-234687P-
27-SEP-2000; 2000US-236359P-
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50 AA;
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Query Match

36.5%;

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Best Local Similarity

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                                                                                                               CC fluid viscosity, enhancing viability of cryopreserved sperm, sperm cc fluid viscosity, enhancing viability of cryopreserved sperm, sperm cc antibodies. Zcys8 is useful as research reagent for characterising sites cof interaction between Zcys8 and its receptor. Zcys8 is useful in cc enhancing fertilisation during assisted reproduction in humans and in cc animals. Anti-(I) antibodies are useful to screen biological samples like colond, urine, saliva, tissue biopsy and autopsy material in vitro for the gresence of Zcys8. The antibodies are also useful to isolate large cc quantities of Zcys8 protein and DNA sequences that encode Zcys8 genes. CC The polynucleotide encoding (I) is useful to detect and to localise the cc expression of a Zcys8 gene in a biological sample and Zcys8 genes. CC cligonucleotide probes are useful for in vivo diagnosis. The cc copy number changes, insertions in the Zcys8 gene like aneuploidy, gene cc cryotes changes, insertions, deletions, restriction site changes and crys8 gene. This sequence represents an antigenic peptide of human cystatin-8 cc (ZrysR)
                Best
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cystatin-8; Zcys8; cancer; procoagulant protein; thrombosis; spermatogenesis; seminal fluid viscosity; cryopreserved sperm; sperm motility; fertilisation; antigenic peptide.
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                                                                                                                                                                                                                                                                                                                                                                                                                       associated with cancer; promoting spermatogenesis, modulating seminal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim
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                  Local Similarity
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   49;
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35.8%; Score 49;
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                                                                                                                                                                                                                                                                      Sequence
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                                                                                                                                         Local Similarity
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NVEMQWTTCQKPETINCVPQERELHKQVNCFFSVFAVPWFEQYKILNK 132
                                                                                                                                                                                                                                                                      48
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                                                                                                            Conservative
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                                                                                                                                                                                                                                                                                                                                                                                      represents an antigenic peptide of human cystatin-8
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                                                                                                                                         35.0%;
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                                                                                                       <u>,</u>
                                                                                                                                             Score 48;
Pred. No.
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U
                                                                                                            Mismatches
                                                                                                                                             DB 23; I
2.4e-41;
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NVEMONTTCQKPETTNCVPQERELHKQVNCFFSVFAVPWFEQYKILNK 48

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RESULT 20
AAU79860
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Best Local S
Matches 46
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                                                                                                                                                                                                        quantities of Zcys8 protein and DNA sequences that encode Zcys8 genes. The polynucleotide encoding (I) is useful to detect and to localise the expression of a Zcys8 gene in a biological sample and Zcys8 oligonucleotide probes are useful for in vivo diagnosis. The polynucleotide encoding (I) is useful in determining whether a subject's polynucleotide encoding (I) is useful in determining whether a subject's chromosomes contain a mutation in the Zcys8 gene like aneuploidy, gene copy number changes, insertions, deletions, restriction site changes and rearrangements and genetic alterations that inactivate the Zcys8 gene. This sequence represents an antigenic peptide of human cystatin-8
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                                                                                                                                                       Sequence
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                                                                                              Similarity
                                  NKESDDKYHFRIFRVLKVQRQVTDHLEYHLNVEMQWTTCQKPETTN 100
                                                                                                                                                       46 AA;
                                                                         33.6%; Suilarity 100.0%; I Conservative 0;
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                                                                         Score 46; DB; Pred. No. 2.6
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                                                                                            DB 23; I
2.6e-39;
                                                                                                                Length 46;
                                                                             Indels
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                                                                         Gaps
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RESULT 21

AAU79858 ID AAU7 XX

AAU79858 standard; Peptide; 35 AA

RESULT 22

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AAU79856
IID AAU7
XX AAU7
XX AAU7
XX AAU7
XX IS-J
XX Huma
XX Huma
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XX IS Homo
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                                                                                                                                                                Query Match
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Matches 36
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 2; Page 95; 100pp; English.
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                                                                                                                                                                                                           Similarity
                                                                                  RKKTFLSVHEVMAVENYAKDSLQWITDQYNKESDDK 61
                                                                                                                                                                                                                                                                                                                                    36
                                                                                                                                                                26.3%; So larity 100.0%; I Conservative 0;
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                                                                                                                                                                Score 36; DB; Pred. No. 3.
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                                                                                                                                                                                                                                              Length 36;
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AAU79858;

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RESULT 23
AAU79862
ID AAU79
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AC AAU79
AC AAU79
DT 15-JU
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CC polypeptide (I). (I) is useful for: inhibiting cancer procoagulant
CC protein in an individual and thus inhibiting the thrombotic events
cassociated with cancer; promoting spermatogenesis, modulating seminal
CC fluid viscosity, enhancing viability of cryopreserved sperm, sperm
CC motility and fertilisation; and as antigenic peptides to generate
CC antibodies. Zcys8 is useful as research reagent for characterising sites
CC of interaction between Zcys8 and its receptor. Zcys8 is useful in
CC enhancing fertilisation during assisted reproduction in humans and in
CC enhancing fertilisation during assisted reproduction in humans and in
CC enhancing fertilisation and its receptor. Zcys8 is useful in
CC enhancing fertilisation and production in humans and in
CC entities of Zcys8; The antibodies are also useful to isolate large
CC presence of Zcys8; The antibodies are also useful to isolate large
CC puntities of Zcys8 protein and DNA sequences that encode Zcys8 genes.
CC The polynucleotide encoding (I) is useful to detect and to localise the
CC expression of a Zcys8 gene in a biological sample and Zcys8
CC oligonucleotide probes are useful for in vivo diagnosis. The
CC polynucleotide probes are useful for in vivo diagnosis. The
CC copy number changes, insertions, deletions, restriction site changes and
CC rarrangements and genetic alterations that inactivate the Zcys8 gene.
CC This sequence represents an antigenic peptide of human cystatin-8
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Best Local :
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 15-JUL-2002
                                    AAU79862;
                                                                       AAU79862 standard; Peptide; 33
                                                                                                                                                                                                                                                                                                                   Sequence
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                                                                                                                                                                                            44 KDSLQWITDQYNKESDDKYHFRIFRVLKVQRQVTD 78
                                                                                                                                                                                                                                            35;
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                                                                                                                                                                                                                                                             Similarity
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                                                                                                                                                                                                                                        25.5%; Score 35;
100.0%; Pred. No.
:ive 0; Mismatc
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RESULT 24
AAU79859
ID AAU79
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AC AAU75
DT 15-JU
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                                                           15-JUL-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                    Sequence
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                                                                                                                                    AAU79859 standard; Peptide; 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 2; Page 97; 100pp; English.
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100.0%; Pre
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Pred. No. 3.6e-26;
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Human cystatin-8 (Zcys8) antigenic fragment

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AAU79861
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AC AAU7
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Best Local S
Matches 27
Cystatin-8; Zcys8; cancer; procoagulant protein; thrombosis; spermatogenesis; seminal fluid viscosity; cryopreserved sper sperm motility; fertillsation; antigenic peptide.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Novel isolated mammalian cystatin-8 polypeptide useful for promoting spermatogenesis, and inhibiting cancer procoagulant protein which leads to inhibition of thrombotic events associated with cancer
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                                                                                               Human cystatin-8 (Zcys8) antigenic fragment #9.
                                                                                                                                                                                                  AAU79861;
                                                                                                                                                                                                                                            AAU79861 standard; Peptide; 24
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27; Conserv
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                                                                                                                                               (first entry)
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100.0%; Pr
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Pred. No.
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                                                    Cystatin-8; Zcys8; cancer; procoagulant protein; thrombosis; spermatogenesis; seminal fluid viscosity; cryopreserved sper sperm motility; fertilisation; antigenic fragment.
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                                                                                                                                 Human cystatin-8 (Zcys8) antigenic fragment #3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (Zcys8).
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                                                                                                                                                                                                                                              standard; Peptide;
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4.2e-17;
                                                                          cryopreserved sperm;
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Homo sapiens

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Best Local S
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                                                                                                     Cystatin-8; Zcys8; cancer; procoagulant protein; thrombosis; spermatogenesis; seminal fluid viscosity; cryopreserved sperm; sperm motility; fertilisation; antigenic peptide.
                                                                                                                                                                            Human cystatin-8 (Zcys8) antigenic fragment #5
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14-MAR-2002.
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                                                                     Homo sapiens.
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I). (I) is useful for: inhibiting cancer procoagula
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                                                                                                                                                                                                                                                                                                                            ABB59363 standard; Protein; 1252
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23-MAR-2000; 2000US-191637P
                                 23-MAR-2001; 2001WO-US09231.
                                                                     27-SEP-2001
                                                                                                                                     Drosophila melanogaster
                                                                                                                                                                                                                       Drosophila melanogaster polypeptide SEQ
                                                                                                                                                                                                                                                                                            ABB59363;
                                                                                                                                                                       pharmaceutical.
                                                                                                                                                                                     Drosophila; developmental biology; cell signalling; insecticide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This sequence represents an antigenic peptide of human cystatin-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (ZYMO ) ZYMOGENETICS
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                                                                                                                                                                                                                                                                                                                                                                                                                                       44 KDSLQWITDQYNKESDDK 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   in an individual and thus inhibiting the thrombotic
                                                                                                                                                                                                                                                                                                                                                                                                                KDSLQWITDQYNKESDDK 18
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                                                                                                                                                                                                                                                           (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 18;
Pred. No.
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4.3e-11;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 18;
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11-JUL-2000; 2000US-0614150

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RESULT 29
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ID AAU66887
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Matches 8
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                                                                                                                                                                                                                                                                                                             21-APR-2000; 2000US-199047P.
02-JUN-2000; 2000US-208841P.
07-JUL-2000; 2000US-216747P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SAPHO syndrome; synovitis; acne; pustulosis; hypertosis; osteomyelitis; uveitis; endophthalmitis; bone; joint; central nervous system; ELISA; inflammatory lesion; acne vulgaris; enzyme linked immunosorbent assay;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to an isolated nucleic acid detection reagent
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New isolated nucleic acid genes from Drosophila and
                                                                                                                                                                              Skeiky YAW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Propionibacterium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Propionibacterium acnes immunogenic protein #27783.
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                                                                                                                                          L'maisonneuve J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                       20-APR-2001; 2001WO-US12865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        dermatological; osteopathic; neuroprotectant.
                                                                                                                                                                                                                                               (CORI-) CORIXA CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (ABB57737-ABB72072)
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                                                                        2001-616774/71.
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                                                                                                                                          Mitcham JL, Wang SS,
, Jen S, Carter D;
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RESULT 30
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Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.
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                         New isolated polymucleotide and encoded polypeptides, u diagnostics, forensics, gene mapping, identification of responsible for genetic disorders or other traits and tresponsible for genetic disorders or other traits.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Propionibacterium acnes polypeptides and nucleic acids useful for vaccinating against and diagnosing infections, especially useful treating acne vulgaris -
                                                                                                                                                                                                                                                                                                                                                                        31-MAR-2000; 2000US-0540217.
23-AUG-2000; 2000US-0649167.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-MAR-2001; 2001WO-US08631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200175067-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; chromosome mapping; gene mapping; gene therapy; forensic; food supplement; medical imaging; diagnostic; genetic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel human diagnostic protein #3223.
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                                                                                                                                                                                                                                                                                                                 (HYSE-) HYSEQ INC.
                                                                                                                                                        2001-639362/73.
DB; AAS67419.
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                                                                                                                                                                                                                                                   Liu C,
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                                                                       mutations
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RESULT 31
AAG21482
   HARRIE REPRESENTATION OF THE PROPERTY OF THE P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to isolated polynucleotide (I) and CC polypeptide (II) sequences. (I) is useful as hybridisation probes, CC polymerase chain reaction (PCR) primers, oligomers, and for chromosome CC polynucleotides are also used in diagnostics as expressed sequence tags CC for identifying expressed genes. (I) is useful in gene therapy techniques CC for identifying expressed genes. (I) is useful in gene therapy techniques CC (II). (II) is useful for generating antibodies against it, detecting or CC (II). (II) is useful for generating antibodies against it, detecting or CC (II). (II) and its binding partners are useful in medical a food supplement. (II) and its binding partners are useful for treating CC imaging of sites expressing (II). (I) and (II) are useful for treating CC disorders involving aberrant protein expression or biological activity. CC The polypeptide and polynucleotide sequences have applications in CC diagnostics, forensics, gene mapping, identification of mutations CC responsible for genetic disorders or other traits to assess biodiversity CC and to produce other types of data and products dependent on DNA and CC amino acid sequences. ABG00010-ABG30377 represent novel human CC diagnostic amino acid sequences of the invention.

CC Note: The sequence data for this patent did not appear in the printed CC specification, but was obtained in electronic format directly from WIPO at figure and products dependent on CC at ftp.wipo.int/pub/published_pct_sequences.
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7; Conserve
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99US-0121825.
99US-012548.
99US-0125788.
99US-0126764.
99US-0127462.
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99US-012945.
99US-0130077.
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99US-0161404.
99US-0161405.
99US-0161359.
99US-0161360.
99US-0161361.
99US-0161992.
99US-0161992.
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99US-0161993.
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y 100.0%; Pro
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
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25-WAY-1999;
27-WAY-1999;
28-WAY-1999;
01-JUN-1999;
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10-JUN-1999;
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  99US-0135124

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99US-013622

99US-013622

99US-0137522

99US-0137724

99US-013804

99US-013804

99US-013804

99US-0139452

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99US-014508

99US-0145276

99US-0145919

99US-0145919
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09-MAR-1999

23-MAR-1999

25-MAR-1999

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16-APR-1999

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21-APR-1999

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31-MAY-1999

32-MAY-1999

33-MAY-1999

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9908-013047

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9908-013149

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99US-0161993.
99US-0162142.
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04-AUG-1999; 05-AUG-1999;	02-AUG-1999; 02-AUG-1999; 02-AUG-1999; 03-AUG-1999; 04-AUG-1999;	27-JUL-1999; 28-JUL-1999;	26-JUL-1999; 27-JUL-1999; 27-JUL-1999;	23-JUL-1999; 23-JUL-1999;	22-JUL-1999; 22-JUL-1999;	22-JUL-1999; 22-JUL-1999;	21-JUL-1999; 21-JUL-1999;	20-JUL-1999; 21-JUL-1999;	19-JUL-1999; 20-JUL-1999; 20-JUL-1999;	19-JUL-1999;	19-JUL-1999;	19-JUL-1999;	16-JUL-1999; 16-JUL-1999;	14-JUL-1999; 15-JUL-1999;	13-JUL-1999;	09-JUL-1999; 12-JUL-1999;	06-JUL-1999; 08-JUL-1999;	01-JUL-1999; 02-JUL-1999;	01-JUL-1999;	29-JUN-1999;	24-JUN-1999;	23-JUN-1999; 23-JUN-1999;	21-JUN-1999; 22-JUN-1999;	18-JUN-1999;	18-JUN-1999;	18-JUN-1999;	18-JUN-1999;	18-JUN-1999;	18-JUN-1999;	18-JUN-1999; 18-JUN-1999;	16-JUN-1999; 17-JUN-1999;	16-JUN-1999;	10-JUN-1999;	08-JUN-1999;	03-JUN-1999; 04-JUN-1999; 07-JUN-1999;
99US-0147302. 99US-0147192.	99US-0146388. 99US-0146389. 99US-0147038. 99US-0147204.	99US-0145919. 99US-0145951.	99US-0145276. 99US-0145913. 99US-0145918.	99US-0145218. 99US-0145214.	99US-0145089. 99US-0145192.	99US-0145085. 99US-0145087.	99US-0145086. 99US-0145088.	99US-0144884. 99US-0144814.	99US-0144355. 99US-0144352. 99US-0144632	99US-0144334.	99US-0144332.	99US-0144325.	99US-0144085. 99US-0144086.	99US-0143624. 99US-0144005.	99US-0143542.	99US-0142920. 99US-0142977.	99US-0142390. 99US-0142803.	99US-0142154. 99US-0142055.	99US-0141842.	99US-0140991.	99US-0140695.	99US-0140353. 99US-0140354.	99US-0139817.	99US-0139763.	99US-0139463.	99US-0139461.	99US-0139459. 99US-0139460.	99US-0139458.	99US-0139456.	99US-0139454. 99US-0139455.	99US-0139453. 99US-0139492.	99US-0139452.	99US-0138847.	9905-0138094.	99US-0137528. 99US-0137502. 99US-0137724.
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G-1999; 99US-01 G-1999; 99US-01	PR 17-UN-1999 99US-013945 PR 18-UN-1999 99US-013946 PR 22-UN-1999 99US-013946 PR 23-UN-1999 99US-014005 PR 03-UN-1999 99US-014005 PR 03-UN-1999 99US-014205 PR 03-UN-1999 99US-014205 PR 03-UN-1999 99US-014205 PR 13-UN-1999 99US-014400 PR 20-UN-1999 99US-014400 PR 21-UN-1999 99US-014400 PR 21-UN-1999 99US-014400 PR 22-UN-1999 99US-014400 PR 23-UN-1999 99US-014500	1999; 99US-013945 1999; 99US-013945

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04-OCT-1999;
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01-SEP-1999;
07-SEP-1999;
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13-SEP-1999;
15-SEP-1999;
16-SEP-1999;
20-SEP-1999;
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16-AUG-1999;
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9908-015066

9908-0151065

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9908-0151106

9908-0151303

9908-015133

9908-0152363

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99US-0148684.
99US-0149368.
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                                     5.1%; but
100.0%; Pr
                                        s; Score 7; DB 2
s; Pred. No. 34;
0; Mismatches
                                                DB 21;
                                                        Length 102;
                                        0,
                                         Indels
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RESULT 37
AAG42195
ID AAG42
XX
AC AAG42
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AAG42195;

AAG42195 standard; Protein; 128 AA.

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RESULT 36
AAU83235
AX
XX
AAU83235
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AX
AX
DT 08-M3
XX
Prote
XX
NO200
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XX
                                                                                                                                                                                                                                                                                                                                                     The invention describes an isolated mammalian secreted polypeptide (MSP) (I) is useful to direct the secretion of other proteins of interest from a host cell, to monitor secretion of proteins, to degenerate sequences comprising all nucleotide sequences encoding a particular polypeptide, to screen for cell metabolism effecting receptors, for identifying new target receptors and drug design, for identifying, for protein purification, for determining the weight of expressed MSP polypeptides as a ratio to total protein expressed, for identifying polypeptides as a ratio to total protein expressed, for identifying peptide cleavage sites, for coupling amino and carboxy terminal tags, for monitoring biological activities of the protein in vitro and in vivo, and to teach analytical skills and as reagents for the study of cells, receptors, and other binding molecules. The polynucleotide is useful for radiation hybrid mapping, and somatic cell genetic technique developed for constructing high-resolution, contiguous maps of mammalian chromosomes. Reagents disclosed in the contiguous may be used to detect metabolic abnormalities characterised by over or under production of the protein. This is the amino acid sequence of a mammalian secreted polypeptide, described in the method of the
                                                                                                                                                             Query Match
Best Local (
                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel isolated mammalian secreted polypeptide useful in therapeutic and diagnostic methods, to direct secretion of other proteins of interest from host cell, as educational tools, and as laboratory practicum kits
                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2002-147999/19.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Novel secreted protein Z935205G2P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          08-MAY-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 12; Page 389; 397pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200202621-A2
                                                                                                                                                                                                                                                                                                                             invention
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ALQLLLA 18
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Pred. No.
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99US-013045. 99US-0130419. 99US-0130449. 99US-0131449. 99US-0132448. 99US-0132486. 99US-0132486. 99US-0132486. 99US-0134218. 99US-0134218. 99US-0134219. 99US-0134768. 99US-0134768. 99US-0136021. 99US-0136021. 99US-0137528. 99US-0137528. 99US-0138640. 99US-0139456. 99US-0139456. 99US-0139456. 99US-0139456. 99US-0139456. 99US-0139456. 99US-0139456. 99US-0139456. 99US-0139466. 99US-0139468. 99US-0139468.	first entry) aliana protein fragment SEQ ID NO: 525 aliana protein fragment SEQ ID NO: 525 fication; signal transduction pathway; assay; genetic mapping; gene expressio quence. aliana. aliana. p9US-0121825. p9US-012348. p9US-0125788. p9US-0125788. p9US-0126264. p9US-0127462. p9US-0127462. p9US-0127462. p9US-0128234.
	metabolic pathway; n control; promoter;
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19-JUL-1999; 20-JUL-1999; 20-JUL-1999; 21-JUL-1999; 21-JUL-1999; 21-JUL-1999; 21-JUL-1999; 22-JUL-1999; 22-JUL-1999; 23-JUL-1999; 23-JUL-1999; 23-JUL-1999; 23-JUL-1999; 23-JUL-1999; 23-JUL-1999; 24-JUL-1999; 25-JUL-1999; 26-JUL-1999; 27-JUL-1999; 27-JUL-1999; 28-JUL-1999; 29-JUL-1999; 20-AUG-1999; 01-AUG-1999; 01-AUG-1999; 01-AUG-1999; 11-AUG-1999; 11-AU	18-JUN-1999; 21-JUN-1999; 22-JUN-1999; 23-JUN-1999; 23-JUN-1999; 24-JUN-1999; 26-JUN-1999; 30-JUN-1999; 01-JUL-1999; 01-JUL-1999; 01-JUL-1999; 01-JUL-1999; 11-JUL-1999; 11-JU
99US-0144334 99US-0144335 99US-0144335 99US-0144884 99US-0145086 99US-0145089 99US-0145089 99US-0145276 99US-0145218 99US-0145218 99US-0145218 99US-0145218 99US-0145218 99US-0145218 99US-0145218 99US-0145218 99US-0145218 99US-0145218 99US-0145218 99US-0145218 99US-0145218 99US-0145218 99US-0145213 99US-0146386 99US-0147302 99US-0147302 99US-0147303 99US-0147303 99US-0147303 99US-0147303 99US-0147303 99US-0147303 99US-0147303 99US-0147303 99US-0147303 99US-0147303 99US-0148311 99US-0148311 99US-0149310 99US-0149320 99US-0149930 99US-0149930 99US-0149930 99US-0149930 99US-0150566	9000 - 80

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RESULT 38
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AC ABB89
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01-SEP-1999;
07-SEP-1999;
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27-AUG-1999;
27-AUG-1999;
30-AUG-1999;
 Cytostatic; immunosuppressive; nootropic; neuroprotective; antiviral; antiallergic; hepatotropic; antidiabetic; antiinflammatory; antiulcer;
                                                           Human
                                                                                                 24-MAY-2002
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S-0158029.
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Novel 1405 isolated polypeptides, useful for diagnosis, treatment and prevention of neural, immune system, muscular, reproductive, gastrointestinal, pulmonary, cardiovascular, renal and proliferative disorders -
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                                                                                                                                               WPI; 2002-122018/16.
N-PSDB; ABL90267.
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                                                                                                                                                                                                                                                                                                        (HUMA-) HUMAN GENOME SCI INC.
                                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                      Rosen CA;
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cc medical conditions e.g. by protein or gene therapy. The genes are cc isolated from a range of human tissues disclosed in the specification. CC The nucleic acids, proteins, antibodies and (ant) agonists are useful cc in the diagnosis, treatment and prevention of: (a) cancer, e.g. breast cc and ovarian cancer and other cancers of the adrenal gland, bone, bone cc marrow, breast, gastrointestinal tract, liver, lung, or urogenital; cc (b) immune disorders e.g. Addison's disease, allergies, autoimmune cc haemolytic anaemia, autoimmune thyroiditis, diabetes mellitus, Crohn's cdisease, multiple sclerosis, rheumatoid arthritis and ulcerative cc colitis; (c) cardiovascular disorders such as myocardial ischaemias; cc (d) wound healing; (e) neurological diseases e.g. cerebral anoxia and cc epilepsy; and (f) infections diseases such as viral, bacterial, fungal content of the semisoro. Sequence printed The sequence data for this patent did not form part of ted specification, but was obtained in electronic format WIPO at ftp.wipo.int/pub/published_pct_sequences. 182 AA;

Claim 11;

SEQ ID NO 2234; 2081pp +

Sequence Listing; English

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Matches
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                                ABB90713 standard; Protein; 184
                                                                                                               Local
                                                                       88
                                                                                     12 LAILLTL 18
                                                                                                     Similarity
7; Conserve
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                                                                                                       Conservative
(first entry)
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Pred. No. 56;
0; Mismatches
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                                                                                                         0,
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Chlamydial infection; antigen; immunogen; vaccine; diagnosis; human respiratory disease; cardiovascular disease; atherosclerosis; coronary artery disease; carotid artery stenosis; myocardial infarction; cerebrovascular disease; aortic aneurysm; claudication; stroke;

strain CWL029

Chlamydia pneumoniae

cp6868

protein,

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ID NO:375

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RESULT 40
ABB68742
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                                                                                                                                                                                                                                                                                                                                                                  them. The proteins are predicted to be immunogenic and may therefore be useful in vaccine production and for diagnostic purposes. Chlamydia pneumoniae is a common cause of respiratory disease in humans, and is also involved in the development of cardiovascular diseases such as catherosclerosis, coronary artery disease, carotid artery stenosis, myocardial infarction, cerebrovascular disease, artic aneurysm, claudication and stroke. The proteins and nucleic acids of the invention may be used in vaccines and pharmaceutical compositions for the prevention or treatment of chlamydial infections, particularly Chlamydia pneumoniae infections. The proteins may also be used in the detection of Chlamydia pneumoniae, and the nucleic acids may be used in the detection of Chlamydia pneumoniae, and the nucleic acids may be used in the content of Chlamydia pneumoniae gene expression. The present sequence represents a precifically claimed Chlamydia pneumoniae protein of the invention.
                                                                                                                                                                                                                                                                                                     Query Match
Best Local S
Matches 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               03-JUL-2000;
11-JUL-2000;
21-JUL-2000;
07-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequences ABB90526-ABB90715 represent novel proteins from Chlamydia pneumoniae (strain CWL029), and ABL91184-ABL91373 represent DNA enc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel Chlamydia pneumoniae protein useful in the manufacture of a medicament for treatment or prevention of infection due to Chlamydia, preferably Chlamydia pneumoniae, and for diagnostic purposes -
Drosophila melanogaster.
                                          Drosophila; developmental biology; cell signalling; insecticide;
                                                                         Drosophila
                                                                                                        26-MAR-2002
                                                                                                                                      ABB68742;
                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                               ABB68742 standard; Protein; 228 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; Page 185; 364pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ratti G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       03-JUL-2001; 2001WO-IB01445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chlamydia pneumoniae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     22-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10-NOV-2000;
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                                                                                                                                                                                                                                                                                                     Local Similarity nes 7; Conserv
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DB; ABL91371.
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                                                                                                                                                                                                                                                                        RECEIFLS 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Grandi G;
                                                                        melanogaster polypeptide SEQ ID NO 33018.
                                                                                                                                                                                                                                                                                                                                                                  184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; 2000GB-0020440.
; 2000GB-0022583.
; 2000GB-0027549.
                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                     (first entry)
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                                                                                                                                                                                                                                                                                                   5.1%; Score 7; DB;
100.0%; Pred. No. 57
Live 0; Mismatches
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                                                                                                                                                                                                                                                                                                                               Length 184;
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RESULT 41
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Best Local
                                                                                               23-MAR-2000; 2000US-191637P.
11-JUL-2000; 2000US-0614150.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to an isolated nucleic acid detection reagent capable of detecting 1000 or more genes from Drosophila. The invention useful in developmental biology and in elucidating cell signalling and cell-cell interactions in higher eukaryotes for the development of insecticides, therapeutics and pharmaceutical drugs. The invention discloses genomic DNA sequences (ABLI6176-ABL30511), expressed DNA sequences (ABLI6175) and the encoded proteins
Venter JC,
                                                                                                                                                                      23-MAR-2001; 2001WO-US09231.
                                                                                                                                                                                                                        27-SEP-2001.
                                                                                                                                                                                                                                                                     WO200171042-A2
                                                                                                                                                                                                                                                                                                                   Drosophila melanogaster
                                                                                                                                                                                                                                                                                                                                                                  pharmaceutical.
                                                                                                                                                                                                                                                                                                                                                                                       Drosophila; developmental biology; cell signalling; insecticide;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABB70167;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (ABB57737-ABB72072).
The sequence data for this patent did not form specification, but was obtained in electronic t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      at ftp.wipo.int/pub/published_pct_sequences.
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                                                  (PEKE ) PE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; SEQ ID NO 33018; 21pp + Sequence Listing;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2001-656860/75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Venter JC, Adams M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23-MAR-2000; 2000US-191637P.
11-JUL-2000; 2000US-0614150.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity 7; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HLNVEMQ 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HLNVEMQ
                                                  CORP NY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           228 AA;
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Adams M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5.1%;
ilarity 100.0%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
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PWD,
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  Myers
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  EW;
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lo. 68;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 228;
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                 The present invention is related to a Lactococcus lactis nucleotide sequence (ABA90521) and related proteins (ABB53300-ABB5521). The nucleic acid sequence is useful in the detection and/or amplification nucleic acid sequence, particularly to identify Lactococcus lactis or related species. The proteins of the invention are useful for the biosynthesis or biodegradation of a composition of interest. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Biosynthesis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16-MAY-2002
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N-PSDB; ABL14270.
                                                                                                                                                                                                                    Claim
                                                                                                                                                                                                                                                                     New nucleotide sequence useful in the lactis and related species -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11-APR-2000; 2000FR-0004630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Lactococcus lactis protein yejI.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                (INRG ) INRA
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  invention helps
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  research in lactic bacteria,
                                                                                                                                                                                                                    No 510; 2504pp; French.
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100.0%;
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Pred. No.
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78;
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  particularly useful in
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Best Local S
Matches 7
                                                                               AAA65809 to AAA65889 and AAA66058 to AAA66138 represent nucleotide sequences derived from Escherichia coli which inhibit E. Coli proliferation. AAA65890 to AAA66055 and AAB15886 to AAB16040 represent nucleotide and protein sequences associated with E. coli proliferation. AAA66057 represent primers used for sequencing E. coli proliferation inhibiting nucleotide insers used for sequencing E. coli proliferation inhibiting nucleotide inserts in an example from the present invention can be used to identify a proliferation-required gene in a microorganism, by contacting microorganism with a proliferation-required gene activity inhibitory nucleic acid identified in another organism, and determining if inhibition occurs in the second microorganism. The nucleic acid sequence identified as being required for bacterial growth and proliferation, can identified as being required for bacterial growth and proliferation, can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel polynucleotides and polypeptides associated with microorganism proliferation, used to identify inhibitors of bacterial growth and proliferation, for use in antisense therapy -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                production of yogurt and cheese. Note: The sequence data for this patent is based on equivalent patent WO200177334 (published 18-OCT-2001) which is available in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            E. coli proliferation associated protein sequence SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAB15904;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 11; Page 190-191; 316pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27-JAN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27-JAN-2000; 2000WO-US02200
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Escherichia coli; B. coli; proliferation; inhibition; antimicrobial; bacterial growth; antisense therapy; an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      05-OCT-2000
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                                                               for antisense therapy
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            <u>.</u>
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Pred. No.
                                                               for killing
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84;
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                                                                  bacteria.
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                                                                                                                         The nucleic acid sequences
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RESULT 44
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CC polypeptide selected from a polypeptide of open reading frames (ORF)
CC polypeptide selected from a polypeptide of open reading frames (ORF)
CC anoplanin biosynthesis gene cluster, by contacting the biological molecule with the isolated polypeptide, where the polypeptide chemically modifying a conficult with the isolated polypeptide, where the polypeptide chemically modifies the biological molecule. The method comprises contacting the biological molecule with at least two different polypeptides encoded by ramoplanin ORFs 1-31. The polypeptides are useful for directing the biological molecule with at least two different polypeptides encoded by ramoplanin ORFs 1-31. The polypeptides are useful for directing the biosynthesis of the antibiotic structures. An isolated polypeptide or its encoding nucleic acid sequence is useful as a substrate for the ramoplanin for improving production or for producing variants of other antibiotics of the peptide class. The isolated polypeptides are useful for synthesis of ramoplanin in vivo or in vitro, as an adenylation domain in conjunction with other peptide synthetase modules and allowing the corporation of Thr into a peptide antibiotic precursor, for modifying fatty acid structure and/or enhancing fatty acid incorporation into the peptide antibiotic structure, for production of an hydroxyphenylalycine ramoplanin products or its variants or derivatives, tor enhancing uptake of ramoplanin products or its variants or derivatives, to chlorinate HPG of a peptide antibiotic precursor, and for designing specific nucleotide producing microorganisms. This sequence represents one of the ORF producing not the ramoplanin producing Actinoplanes sp. microorganism of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to an isolated ramoplanin biosynthetic pathway
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel isolated ramoplanin biosynthetic pathway polypeptide useful for chemically modifying biological molecule that is a substrate for a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13-OCT-2000; 2000US-239924P.
12-APR-2001; 2001US-283296P.
24-JUL-2001; 2001US-0910813.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 14; Page 136-137; 212pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   polypeptide encoded by a ramoplanin biosynthesis gene cluster
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (ECOP-) ECOPIA BIOSCIENCES INC
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Best Local (
                                                                  Query Match
                                                                                                                                                                      capable of detecting 1000 or more genes from Drosophila. The invention useful in developmental biology and in elucidating cell signalling and cell-cell interactions in higher eukaryotes for the development of insecticides, therapeutics and pharmaceutical drugs. The invention discloses genomic DNN sequences (ABL16176-ABL30511), expressed DNA discloses genomic DNN sequences (ABL16176-ABL30511).
                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Drosophila melanogaster polypeptide SEQ ID NO 35577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              the invention.
                                                                                                                                                                                                                                   The invention relates to an isolated nucleic acid detection reagent
                                                                                                                                                                                                                                                          Disclosure; SEQ ID NO 35577; 21pp + Sequence Listing; English
                                                                                                                                                                                                                                                                                            genes from Drosophila and
                                                                                                                                                                                                                                                                                                        New isolated nucleic acid
                                                                                                                                                                                                                                                                                                                                          WPI; 2001-656860/75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Drosophila melanogaster.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           pharmaceutical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Drosophila; developmental biology; cell signalling; insecticide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABB69595 standard; Protein; 361 AA
                                                                                                               at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                             The sequence data for this patent did not form specification, but was obtained in electronic i
                                                                                                                                                                sequences
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11-JUL-2000; 2000US-0614150.
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                                                                                                                                                                                                                                                                                                                                                                                         (PEKE ) PE
                                                                                                                                                  sequences (ABL01840-ABL16175) and the encoded proteins (ABB57737-ABB72072).
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231 LQLLLAI 237
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                                                                                                                                                                                                                                                                                            detection reagent for detecting 1000 or more for elucidating cell signalling and cell-cell
                                           Score 7; DB 2; Pred. No. 1e+
                                             0;
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                                                                                                                             n part of the printed format directly from
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                                                                    Length 361;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 333;
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                                             Gaps
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AAU08679
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 46
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03-MAR-2000; 2000US-186718P.
06-MAR-2000; 2000US-187293P.
06-MAR-2000; 2000US-187294P.
17-MAR-2000; 2000US-190400P.
07-APR-2000; 2000US-190400P.
03-JAN-2001; 2001US-259548P.
                                                                           The invention relates to human FCTRX polypeptides, FCTR1-FCTR7, and the nucleic acids encoding them. These sequences are useful for the treatment or prevention of numerous disorders including myelogenous leukaemia, carcinomas, melanomas, gliomas, astrocytomas, congenital neonatal alloimmune thrombocytopaenia, neurological disorders, neurodegenerative disorders, nerve trauma, familial myelodysplastic syndrome, mental health conditions, immunological disorders, allergy and infection, bornochial asthma, Avellino type eosinophilia, lung diseases, reproductive disorders, infertility, male and female reproductive disorders, deafness, glycoprotein is deficiency, desmoid disease, turcot syndrome, liver cirrhosis, hepatitis C, gastric disorders care acceptance of the control of t
   desmoid disease, turcot syndrome, liver cirrhosis, hepatitis C, gastric disorders, pancreatic diseases such as diabetes, Schistosoma mansoni infection Spinocerabellar ataxia, Plasmodium falciparum parasitaemia, Corneal dystrophy-Greonouw type I Corneal descriparum parasitaemia,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel polypeptides designated as FCTRX polypeptides, useful in detection, prevention and treatment of a broad range of pathological
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Vernet CAM,
Macdougall J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-MAR-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURA-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             therapy; FCTR3a; neurestin-like protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2001-596837/67.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1; Page 33; 215pp;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURAGEN CORP.
dystrophy-Greenouw type I, Corneal dystrophy-lattice type I and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Fernandes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2001WO-US07160
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          carcinoma; melanoma; glioma;
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RESULT 47
AAB61141
ID AAB61
XX AAB61
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Best Local
treating or preventing NOVX-associated disorders. They are also useful for determining the presence of or a predisposition to a disease associated with altered levels of the NOVX polypeptide or nucleic acid. These NOVX-associated disorders include hyperplasias, tumours, restenosis, psoriasis, Dupuytren's contracture, diabetic complications, rheumatoid arthritis, cerebral lesions, diabetic neuropathies, cerebral oedema, senile dementia or Alzheimer's disease. The NOVX polymucleotides are especially useful in gene therapy. Specifically, NOVX is useful as a diagnostic marker or prognostic marker, protein therapeutic and antibody target or small molecule drug target to treat disorders in the immune response pathway, thyroid and metabolic diseases, bone metabolic disorders, diseases of the pancreas (e.g. diabetes or digestive disorders), proliferative diseases, or tissue regeneration and development (e.g. wound healing or treatment of burns).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22-MAR-2000;
30-MAR-2000;
31-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New NOVX polypeptides and polynucleotides, useful in gene therapy, as a diagnostic marker, protein therapeutic, antibody or small molecule drug target for treating immune, proliferative and metabolic diseases and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cerebroprotective; immunomodulator; vulnerary; vasotropic; gene therapy; hyperplasia; tumour; restenosis; psoriasis; Dupuytren's contracture; diabetes; rheumatoid arthritis; cerebral oedema; Alzheimer's disease.
                                                                                                                                                                                                                                                                                                                                                                                                                         The present sequence is a new isolated polypeptide (NOVX). polypeptides, NOVX nucleic acids, and anti-NOVX antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1; Page 42-44; 194pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             wound healing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              N-PSDB; AAF27859
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            03-JUN-1999;
16-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-JUN-2000; 2000WO-US15303
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; NOVX; antiinflammatory; cytostatic; neuroprotective;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human NOV11 protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            neurestin-like
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Reis-Bucklers corneal dystrophy. This sequence represents FCTR3a, a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (CURA-) CURAGEN CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2001-102403/11.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  381
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; 2000US-0189810.
; 2000US-0191158.
; 2000US-0193086.
; 2000US-0137322.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Herrman
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                               are useful for
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RESULT 48
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Matches 7; Conserv
                                                                              Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                 04-NOV-1998;
28-NOV-1997;
17-DEC-1997;
                                                                                                                              AAY36754-Y37949 are encoded by open reading frames (ORFS) of the genome of Chlamydia trachomatis (see AAZ01425). The polypeptides can be used as vaccines against Chlamydia trachomatis. Antisense and ribozyme sequences can also be used to control growth of the microorganism. Chlamydia trachomatis is responsible for a large number of diseases, e.g. eye diseases such as conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion conjunctivitis; genital diseases such as nongonococcal uretritis, epidymitis, cervicitis, salpingitis, perihepatitis, bartholinitis; pneumopathy in breast feeding infants; and venereal lymphogranulomatosis. The polypeptides of the invention may be of use in treating these diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Vaccine; eye disease; conventional trachoma; nonendemic trachoma; paratrachoma; inclusion conjunctivitis; genital disease; perihepatitis; nongonococcal uretritis; epidymitis; cervicitis; salpingitis;
                                                                                                                                                                                                                                                                                                Disclosure;
                                                                                                                                                                                                                                                                                                                        Genome sequence of Chlamydia trachomatis
                                                                                                                                                                                                                                                                                                                                                                               Griffais R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-OCT-1999
                                                                                                                                                                                                                                                                                                                                                    WPI; 1999-371125/31
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chlamydia trachomatis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              bartholinitis; pneumopathy; venereal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Amino acid sequence of a Chlamydia trachomatis protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAY37807 standard; Protein; 394
                                                                                                                                                                                                                                                                                                                                                                                                        (GEST ) GENSET
                                                                 Local
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57
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                                                   Similarity 7; Conserv
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OALQLLL
                          QALQLLL 12
                                                                                                          394
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                                                   Conservative
                                                                                                                                                                                                                                                                                               Page 1383; 1755pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                  98US-0107077.
97FR-0015041.
97FR-0016034.
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63
                                               5.1%; but
100.0%; Pr
                                                   s; Score 7; DB 2
b; Pred. No. 1.1
0; Mismatches
                                                   DB 20; Le
o. 1.1e+02;
ches 0;
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                                                                            Length 394;
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                                                     Gaps
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RESULT

49

밁 S

222

10 LLLAILL 16

Matches

Conservative

0

Mismatches

Indels

0

Gaps

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AAB36700
ID AAB3
ID AAB3
XX AAB3
XX AAB3
XX AAB3
XX Huma
XX Homc
XX Homc
XX WO20
XX WO20
XX WO20
XX HOMC
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XX HU
                                             Query Match
Best Local
                                                                                                                                                                                                               parasite, bacteria and viruses, restenosis and graft versus host disease. They are also useful for inducing proliferation of T-cells, endothelial cells and certain haematopoietic cells, to regulate antiviral responses and to prevent certain autoimmune diseases after stimulation of TRID by an agonist or TRAIL binding facilitator. The antibodies which bind TRID polypeptides are useful for treating and/or preventing diseases associated with increased or decreased apoptotic cell death. The TRID polymucleotides, proteins, antibodies, agonists and antagonists are useful in the diagnosis, treatment or prevention of: (a) cancer; (b) autoimmune disorders; (c) diseases associated with increased apoptosis; (d) cardiovascular disorders; and (e) viral infection. The present sequence represents a tumour necrosis factor receptor used in comparison with TRID in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; tumour necrosis factor receptor 5; TRID; TNFR-5; TR5; nootropic TRAII receptor without intracellular domain; diagnosis; cycostatic; tumour necrosis factor related apoptosis inducing ligand; vasotropic; immunosuppressive; neuroprotective; antiviral; antiinflammatory; anticonvulsant; antiparasitic; cardiant; anti-HIV; antiparkinsonian; gene therapy; restenosis; graft versus host disease; tumour; cancer; apoptotic cell death related disease; autoimmune disorder; cardiovascular disorder; viral infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention describes the human TRID protein (tumour necrosis factor (TNF) related apoptosis inducing ligand (TRAIL) receptor without intracellular domain, also referred to as tumour necrosis factor receptor 5 (TNFR-5 or TR5). TRID has cytostatic, immunosuppressive, nootropic, neuroprotective, antiviral, antiinflammatory, anticonvulsant, antiparasitic, cardiant, anti-HIV, antiparkinsonian and vasotropic activities, and can be used in gene therapy. The TRID polymucleotides are useful for detecting complementary polymucleotides. TRID proteins an polymucleotides are useful in the treatment of tumours, resistance to
                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Nucleic acid encoding a TRID polypeptide, also referred to as t
necrosis factor receptor 5, useful in the diagnosis, treatment
prevention of cancer, autoimmune disorders and viral infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAB36700 standard; Protein; 415 AA.
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ABP96138
Search completed: January 21, 2004, 12:26:34 Job time : 43 secs
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                                                                문
                                                                                                                                                                                                                                       The present invention describes human tumour necrosis factor receptor 2 related protein variant (TMPR2PV). TMPR2PV has cytostatic, antiasthmatic and immunosuppressive activities, and can be used in gene therapy. The TMPR2PV cDNA or protein sequences can be used for preparing a composition for treating a disease or condition associated with increased TMF signalling e.g., cancer of the prostate, ovary, gallbladder, breast, brain, liver or colon, or inflammatory disorders, such as rheumatoid arthritis, asthma or ulcerative colitis. The present sequence represents a mouse lymphotoxin-beta receptor amino acid sequence, which is given in comparison with human TMPR2PV in the exemplification of the present
                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Fig 2A-C; 64pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        New cDNA, useful for preparing a composition for treating a disease or condition associated with increased TNF signaling e.g., cancer of the prostate, ovary, gallbladder, breast, brain, liver or colon, or rheumatoid arthritis, asthma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; tumour necrosis factor receptor 2 related protein variant; TNFR2PV; cytostatic; immunosuppressive; antiasthmatic; gene therapy; TNF signalling; cancer; inflammatory disorder; rheumatoid arthritis; asthma; ulcerative colitis.
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                                                                                                                                                                                                                             invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (INCY-) INCYTE GENOMICS INC.
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ALIGNMENTS

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; TITLE OF INVENTION: Mammalian Cystatin-8 and Its Use to ; TITLE OF INVENTION: Inhibit Cancer Procoagulant Protein	; APPLICANT: ZymoGenetics, Inc.	; GENERAL INFORMATION:	; Patent No. US20020142396A1	; Sequence 2, Application US/09941314	US-09-941-314-2	RESULT 1
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APPLICANT: ZymoGenetics, Inc.
FITTLE OF INVENTION: Mammalian Cystatin-8 and Its Use
FITTLE OF INVENTION: Inhibit Cancer Procoagulant Pro
FILE REFERENCE: 00-81PC
CURRENT APPLICATION NUMBER: US/09/941,314
CURRENT FILING DATE: 2001-08-29
PRIOR APPLICATION NUMBER: 60/230,230
PRIOR APPLICATION NUMBER: 60/230,230
PRIOR FILING DATE: 2001-09-01
NUMBER OF SEQ ID NOS: 19
SOPTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 4
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US-09-941-314-2
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Sequence 3, Application US/09941314
Patent No. US20020142396A1
GENERAL INFORMATION:
APPLICANT: ZymoGenetics, Inc.
TITLE OF INVENTION: Mammalian Cystatin-8 and Its Use to
TITLE OF INVENTION: Inhibit Cancer Procoagulant Protein
FILE REFERENCE: 00-81PC
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Patent No. US20020142396A1
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PRIOR FILING DATE: 2001-09-01
NUMBER OF SEQ ID NOS: 19
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CURRENT APPLICATION NUMBER: US/09/941,314
CURRENT FILING DATE: 2001-08-29
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TYPE: PRT
ORGANISM: Homo sapiens
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                                                                                                                                                                                                                                                                                                          LPYQARKKTFLSVHEVMAVENYAKDSLQWITDQYNKESDDKYHFRIFRVLKVQRQVTDHL 60
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-941-314-3
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                                                                                                                                                       Sequence 16, Application US/09941314
Patent No. US20020142396A1
GENERAL INFORMATION:
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SOFTWARE: FASTSEQ for Windows Version
SEQ ID NO 15
LENGTH: 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Patent No. US20020142396A1 GENERAL INFORMATION:
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Best Local
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Best Local Similarity
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CURRENT APPLICATION NUMBER: US/09/941,314
CURRENT FILING DATE: 2001-08-29
PRIOR APPLICATION NUMBER: 60/230,230
PRIOR FILING DATE: 2001-09-01
NUMBER OF SEQ ID NOS: 19
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CURRENT FILING DATE: 2001-08-29
PRIOR APPLICATION NUMBER: 60/230,230
PRIOR FILING DATE: 2001-09-01
NUMBER OF SEQ ID NOS: 19
                                                                                               APPLICANT: ZymoGenetics, Inc.
TITLE OF INVENTION: Mammalian Cystatin-8 and Its Use to
TITLE OF INVENTION: Inhibit Cancer Procoagulant Protein
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CURRENT FILING DATE: 2001-08-29
PRIOR APPLICATION NUMBER: 60/230,230
PRIOR PILING DATE: 2001-09-01
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TITLE OF INVENTION: Mammalian Cystatin-8 and
TITLE OF INVENTION: Inhibit Cancer Procoagul
FILE REFERENCE: 00-81PC
                                                                                      FILE REFERENCE: 00-81PC
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100.0%; Prr
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100.0%; r.
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Procoagulant
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APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K.
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES US/09/864,761
CURRENT APPLICATION NUMBER: US/09/864,761
CURRENT FILING DATE: 2001-05-23
PRIOR APPLICATION NUMBER: US 60/180,312
PRIOR FILING DATE: 2000-05-26
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR APPLICATION NUMBER: US 09/632,366
PRIOR APPLICATION NUMBER: GB 24263.6
PRIOR APPLICATION NUMBER: GB 24263.6
PRIOR APPLICATION NUMBER: US 60/236,359
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US-09-864-761-34822
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US-09-941-314-14
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US-09-941-314-14
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LENGTH: 52
TYPE: PRT
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APPLICANT: ZymoGenetics, Inc.
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Patent No. US20020142396A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
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CURRENT FILING DATE: 2001-08-29
PRIOR APPLICATION NUMBER: 60/230,230
PRIOR FILING DATE: 2001-09-01
NUMBER OF SEQ ID NOS: 19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Penn, Sharron G.
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                       APPLICATION NUMBER: PCT/US01/00666 FILING DATE: 2001-01-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        56 KESDDKYHFRIFRVLKVQRQVTDHLEYHLNVEMQWTTCQKFETTNCVPQERE 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   74 RQVTDHLBYHLNVEMQWTTCQKPETTNCVPQERELHKQVNCFFSVFAVPWFEQYKILNK 132
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NUMBER: PCT/US01/00667
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Pred. No.
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thes 0;
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2.8e-50;
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RESULT 8
US-09-864-761-48936
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Patent No. US20020048763A1
GENERAL INFORMATION:
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OTHER INFORMATION: EXPRESSED IN BONE MAI
OTHER INFORMATION: EXPRESSED IN LUNG, SI
OTHER INFORMATION: EXPRESSED IN BRAIN, SI
OTHER INFORMATION: EXPRESSED IN BRAIN, SI
OTHER INFORMATION: EXPRESSED IN ADULT LI
OTHER INFORMATION: EXPRESSED IN BRAIT, SI
OTHER INFORMATION: EXPRESSED IN BRAIT, SI
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SEQ ID NO 34822
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Best Local Similarity
APPLICANT: Penn, Sharron G.
APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K.
APPLICANT: Chen, Wensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR
TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
FILE REFERENCE: Acomica-X-1
CURRENT APPLICATION NUMBER: US/09/864,761
CURRENT FILING DATE: 2001-05-23
PRIOR APPLICATION NUMBER: US 60/180,312
PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR PILING DATE: 2000-05-26
PRIOR FILING DATE: 2000-05-26
PRIOR FILING DATE: 2000-05-26
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PRIOR FILING DATE: 2000-05-26
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PRIOR APPLICATION NUMBER: PCT/US01/00664
PRIOR FILING DATE: 2001-01-30
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OTHER INFORMATION:
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ORGANISM: Homo sapiens
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FILING DATE: 2001-01-30
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N: EXPRESSED IN PLACENTA, SIGNAL = 1.7

N: EXPRESSED IN ADULT LIVER, SIGNAL = 1.6

N: EXPRESSED IN ETTAL LIVER, SIGNAL = 1.3

N: EXPRESSED IN HETATA, SIGNAL = 1.1

N: EXPRESSED IN HEART, SIGNAL = 1.5

N: EXPRESSED IN HEART, SIGNAL = 1.5

N: EXPRESSED IN HELLO, SIGNAL = 1.2

N: EXPRESSED IN HELLO, SIGNAL = 1.2
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Pred. No.
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LUNG, SIGNAL = 1.5
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APPLICATION NUMBER: US 60/236,359 FILING DATE: 2000-09-27 APPLICATION NUMBER: PCT/US01/00666

APPLICATION NUMBER: GB 24263.6

2000-10-04

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; ORGANISM: Homo sapiens 
US-09-941-314-13
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OTHER INFORMATION: EXPRESSED IN BT474, SIGNAL = 0.96
OTHER INFORMATION: EST_HUMAN HIT: AIZ00857.1, EVALUE 5.00e-23
OTHER INFORMATION: SWISSPROT HIT: O60676, EVALUE 1.00e-01
US-09-864-761-48936
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                                                                           PRIOR APPLICATION NUMBER: 60/230,230
PRIOR FILING DATE: 2001-09-01
NUMBER OF SEQ ID NOS: 19
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 13
                                                                                                                                                                                                                                                                                                      Sequence 13, Application US/09941314
Patent No. US20020142396A1
GENERAL INFORMATION:
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                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/09/941,314
CURRENT FILING DATE: 2001-08-29
                                                                                                                                                                                                                        APPLICANT: ZymoGenetics, Inc.
TITLE OF INVENTION: Mammallan Cystatin-8 and Its
TITLE OF INVENTION: Inhibit Cancer Procoagulant
FILE REFERENCE: 00-81PC
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SOFTWARE: Annomax Sequence Listing Engine vers.
                                        TYPE: PRT
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ORGANISM: Homo sapiens
                                                            LENGTH: 49
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FILING DATE: 2001-01-30
APPLICATION NUMBER: PCT/US01/00669
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APPLICATION NUMBER: US 09/774,203
FILING DATE: 2001-01-29
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APPLICATION NUMBER: US 60/234,687
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Pred. No.
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RESULT 12 US-09-941-314-6

6, Application US/09941314

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; Sequence 17, Application US/09941314
; Patent No. US20020142396A1
; GENERAL INFORMATION:
; APPLICANT: ZymoGenetics, Inc.
; TITLE OF INVENTION: Inhibit Cancer Procoagulant Protein
; FILE REFERENCE: 00-81PC
; CURRENT APPLICATION NUMBER: US/09/941,314
; CURRENT FILING DATE: 2001-08-29
; PRIOR APPLICATION NUMBER: 60/230,230
; PRIOR FILING DATE: 2001-09-01
; NUMBER OF SEQ ID NOS: 19
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                                                                                                                                        ; LENGTH: 46
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-941-314-10
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US-09-941-314-17
                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/09/941,314
CURRENT FILING DATE: 2001-08-29
PRIOR APPLICATION NUMBER: 60/230,230
PRIOR FILING DATE: 2001-09-01
NUMBER OF SEQ ID NOS: 19
SOFTWARE: PastSEQ for Windows Version 4.0
SEQ ID NO 10
                                                                                                                                                                                                                                                                                                                                    Sequence 10, Application US/09941314
Patent No. US20020142396A1
GENERAL INFORMATION:
APPLICANT: ZymoGenetics, Inc.
TITLE OF INVENTION: Mammalian Cystatin-8 and Its Use to
TITLE OF INVENTION: Inhibit Cancer Procoagulant Protein
FILE REFERENCE: 00-81PC
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                                                                    Matches
                                                                                                     Query Match
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Best Local Similarity
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Best Local Similarity
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                                                                    Local Similarity nes 46; Conserv
                  55 NKESDDKYHFRIFRVLKVQRQVTDHLEYHLNVEMQWTTCQKPETTN 100
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NKESDDKYHFRI FRVLKVQRQVTDHLEYHLNVEMQWTTCQKPETTN
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                                                                                    Score 46; DB 10;
Pred. No. 1.2e-37;
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Pred. No. 1.4e-39;
0; Mismatches 0;
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Pred. No.
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Sequence 12, Application US/09941314

Patent No. US20020142396A1

GENERAL INFORMATION: Inc.

APPLICANT: ZymoGenetics, Inc.

TITLE OF INVENTION: Mammalian Cystatin-8 and Its Use to TITLE OF INVENTION: Inhibit Cancer Procoagulant Protein FILE REFERENCE: 00-81PC

CURRENT APPLICATION NUMBER: US/09/941,314

CURRENT FILING DATE: 2001-08-29

PRIOR APPLICATION NUMBER: 60/230,230

PRIOR APPLICATION NUMBER: 60/230,230

PRIOR FILING DATE: 2001-09-01

NUMBER OF SEQ ID NOS: 19

SOFTWARE: FastSEQ for Windows Version 4.0
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-941-314-6
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patent No. US20020142396A1
GENERAL INFORMATION:
APPLICANT: ZymoGenetics, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
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Best Local Similarity
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Patent No. US20020142396A1 GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: Mammalian Cystatin-8 and Its TITLE OF INVENTION: Inhibit Cancer Procoagulant FILE REFERENCE: 00-81/C CURRENT APPLICATION NUMBER: US/09/941,314 CURRENT FILING DATE: 2001-08-29 PRIOR APPLICATION NUMBER: 60/230,230 PRIOR PILING DATE: 2001-09-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: Mammalian Cystatin-8 and Its
TITLE OF INVENTION: Inhibit Cancer Procoagulant
FILE REFERENCE: 00-812C
CURRENT APPLICATION NUMBER: US/09/941,314
CURRENT FILING DATE: 2001-08-29
PRIOR APPLICATION NUMBER: 60/230,230
PRIOR APPLICATION NUMBER: 60/230,230
PRIOR FILING DATE: 2001-09-01
NUMBER OF SEG ID NOS: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS:
SOFTWARE: FastSEQ for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 35
                                                                                                                                                                                                                                                                                                                                                                                        44 KDSLQWITDQYNKESDDKYHFRIFRVLKVQRQVTD 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26 RKKTFLSVHEVMAVENYAKDSLQWITDQYNKESDDK 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                   35;
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100.0%; Pr
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)%; Pred. No. 6.2e-28;
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                                                                                                   ; TYPE: PRT ; ORGANISM: Homo sapiens US-09-941-314-11
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; ORGANISM: Homo sapiens
US-09-941-314-9
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US-09-941-314-9
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                                                                                                                                                SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 11 LENGTH: 24
                                                                                                                                                                                                                                                                                                                Sequence 11, Application US/09;
Patent No. US20020142396A1
GENERAL INFORWATION:
APPLICANT: ZymoGenetics, Inc.
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SEQ ID NO 9
LENGTH: 27
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APPLICANT: ZymoGenetics, Inc.
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                                                       Query Match
Best Local
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CURRENT APPLICATION NUMBER: US/09/941,314
CURRENT FILLING DATE: 2001-08-29
PRIOR APPLICATION NUMBER: 60/230,230
PRIOR FILING DATE: 2001-09-01
NUMBER OF SEQ ID NOS: 19
                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/09/941,314
CURRENT FILING DATE: 2001-08-29
PRIOR APPLICATION NUMBER: 60/230,230
PRIOR FILING DATE: 2001-09-01
                                                                                                                                                                                                                                                                     TITLE OF INVENTION: Mammalian Cystatin-8 and Its TITLE OF INVENTION: Inhibit Cancer Procoagulant FILE REFERENCE: 00-81PC
                                                                                                                                                                                              NUMBER OF SEQ ID NOS: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: Mammalian Cystatin-8 and Its Use to TITLE OF INVENTION: Inhibit Cancer Procoagulant Protein
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74 ROVIDHLEYHLNVEMQWITCQKPB 97
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27; Conserv
                                                         Similarity
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                                          Conservative
                                  17.5%; Drr
100.0%; Prr
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0; Mismatches
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Pred. No.
                                                         Score 24;
Pred. No.
                                            Mismatches
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3.1e-19
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2.5e-16
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ROVIDHLEYHLINVEMOWITCOKPE 24

RESULT 17 US-09-941-314-5

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Publication No. US20030233675A1
GENERAL INFORMATION:
APPLICANT: Cao, Yongwei
APPLICANT: Hinkle, Gregory J.
APPLICANT: Slater, Steven C.
APPLICANT: Goldman, Barry S.
APPLICANT: Chen, Xianfeng
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US-09-941-314-7
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TITLE OF INVENTION: Mammalian Cystatin-8 and Its Use
TITLE OF INVENTION: Inhibit Cancer Procoagulant Pro
FILE REFERENCE: 00-81-C
CURRENT APPLICATION NUMBER: US/09/941,314
CURRENT FILING DATE: 2001-08-29
PRIOR APPLICATION NUMBER: 60/230,230
PRIOR FILING DATE: 2001-09-01
NUMBER OF SEQ ID NOS: 19
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                US-10-369-493-6050
                                                                                                                                                                                                                  RESULT 19
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US-09-941-314-7
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-941-314-5
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 7
LENGTH: 18
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Patent No. US20020142396A1
GENERAL INFORMATION:
APPLICANT: ZymoGenetics, Inc.
TITLE OF INVENTION: Mammalian Cystatin-8 and Its Use to
TITLE OF INVENTION: Inhibit Cancer Procoagulant Protein
FILE REFERENCE: 00-81PC
                                                                                                                                                        Sequence 6050, Application US/10369493 Publication No. US20030233675A1
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Patent No. US20020142396A1
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  TITLE OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 60/230,230 PRIOR FILING DATE: 2001-09-01
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CURRENT FILING DATE: 2001-08-29
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                                                                                                                                                                                                                                                                                                                                                        18;
INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION INVENTION: PLANTS WITH IMPROVED PROPERTIES
                                                                                                                                                                                                                                                                                                                KDSLOWITDOYNKESDDK 61
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100.0%; Pred. No.
tive 0; Mismatc
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FILE REFERENCE: 38-10(52052)B
CURRENT APPLICATION NUMBER: US/10/369,493
CURRENT FILING DATE: 2003-02-28
PRIOR APPLICATION NUMBER: US 60/360,039
PRIOR FILING DATE: 2002-02-21
NUMBER OF SEQ ID NOS: 47374
SEQ ID NO 6050
LENGTH: 1851
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APPLICANT: Cao, Yongwei
APPLICANT: Hinkle, Gregory J.
APPLICANT: Slater, Steven C.
APPLICANT: Goldman, Barry S.
APPLICANT: Chen, Xianfeng
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TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS TITLE OF INVENTION: PLANTS WITH IMPROVED PROPERTIES FILE REFERENCE: 38-10 ($2052) B CURRENT APPLICATION NUMBER: US/10/369,493 CURRENT FILING DATE: 2003-02-28 PRIOR APPLICATION NUMBER: US 60/360,039 PRIOR APPLICATION NUMBER: US 60/360,039 PRIOR PILING DATE: 2002-02-21 NUMBER OF SEQ ID NOS: 47374 SEQ ID NO 6048
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SEQ ID NO 6049
LENGTH: 1966
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Matches 8; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: EXERESSION OF MICROBIAL PROTEINS TITLE OF INVENTION: PLANTS WITH IMPROVED PROPERTIES FILE REFERENCE: 38-10 ($2052)B CURRENT APPLICATION NUMBER: US/10/369,493 CURRENT FILING DATE: 2003-02-28 PRIOR APPLICATION NUMBER: US 60/360,039 PRIOR FILING DATE: 2002-02-21
                                                                                                                                                                         APPLICANT: Cao, Yongwei
APPLICANT: Hinkle, Gregory J.
APPLICANT: Slater, Steven C.
APPLICANT: Goldman, Barry S.
APPLICANT: Chen, Xianfeng
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
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nes 8; Conservative
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b; Pred. No. 53;
0; Mismatches
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Pred. No.
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o. 56;
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US-10-312-273-375
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-893-737-322
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                                                                                                                                                                                                                                   TITLE OF INVENTION: IMMUNISATION AGAINST CHI
FILE REFERENCE: PO25035W0
CURRENT APPLICATION NUMBER: US/10/312,273
CURRENT PILING DATE: 2002-12-20
PRIOR APPLICATION NUMBER: 0016363.4
PRIOR FILING DATE: 2000-07-03
PRIOR APPLICATION NUMBER: 0017047.2
PRIOR PILING DATE: 2000-07-11
PRIOR PILING DATE: 2000-07-11
PRIOR APPLICATION NUMBER: 0017983.8
PRIOR PILING DATE: 2000-07-21
PRIOR APPLICATION NUMBER: 0019368.0
PRIOR APPLICATION NUMBER: 0019368.0
PRIOR PILING DATE: 2000-08-07
PRIOR PILING DATE: 2000-08-07
PRIOR APPLICATION NUMBER: 0019368.0
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PRIOR FILING DATE: 2000-06-30
NUMBER OF SEQ ID NOS: 329
SOFTWARE: FASTSEQ for Windows Version 3.0
SEQ ID NO 322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 375, Application US/10312273 Publication No. US20040005667A1 GENERAL INFORMATION:
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NUMBER OF SEQ ID NOS: 664
SOFTWARE: SegWin99, version 1.
EQ ID NO 375
                                                                      PRIOR APPLICATION NUMBER: 0031706.5 PRIOR FILING DATE: 2000-12-22
                                                                                                              PRIOR APPLICATION NUMBER: 0020440.4
PRIOR FILING DATE: 2000-08-18
PRIOR APPLICATION NUMBER: 0022583.9
PRIOR FILING DATE: 2000-09-14
PRIOR APPLICATION NUMBER: 0027549.5
PRIOR FILING DATE: 2000-11-10
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CURRENT FILING DATE: 2001-06-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Sheppard, Paul O.
APPLICANT: Presnell, Scott R.
TITLE OF INVENTION: MAMMALIAN SECRETED PROTEINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILE REFERENCE: 00-41
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Local Similarity 100.0%; I
hes 8; Conservative 0;
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                                   version 1.02
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Pred. No.
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5. 77;
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; TYPE: PRT; ORGANISM: Chlamydia pneumoniae US-10-312-273-375
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SEQ ID NO 261
LENGTH: 330
NUMBER OF SEQ ID NOS:
SEQ ID NO 5849
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                                                                                                                                                                                                                                                                                                         Sequence 5849, Application US/10369493 Publication No. US20030233675A1
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Matches 7; Conserv
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                                    APPLICANT: Cao, Yongwei
APPLICANT: Hinkle, Gregory J.
APPLICANT: Slater, Steven C.
APPLICANT: Slater, Steven C.
APPLICANT: Goldman, Barry S.
APPLICANT: Chen, Xianfeng
TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF
TITLE OF INVENTION: PLANTS WITH IMPROVED PROPERTIES
FILE REFERENCE: 38-10(52052)B
FILE REFERENCE: 38-10(52052)B
CURRENT APPLICATION NUMBER: US/10/369,493
CURRENT FILING DATE: 2003-02-28
PRIOR APPLICATION NUMBER: US 60/360,039
PRIOR FILING DATE: 2002-02-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Carr, Grant J.

APPLICANT: Yamamoto, Robert T.

APPLICANT: Xu, H. Howard

TITLE OF INVENTION: GENER IDENTIFIED AS REQUIRED FOR PROLIPERATION IN

TITLE OF INVENTION: BECHERICHIA COLI
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CURRENT APPLICATION NUMBER: US/09/912,020
CURRENT FILING DATE: 2001-07-23
CURRENT FILING DATE: 09/492,709
PRIOR APPLICATION NUMBER: 09/492,709
PRIOR APPLICATION NUMBER: 60/117,405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Zyskind, Judith
APPLICANT: Ohlsen, Kari L.
APPLICANT: Trawick, John
APPLICANT: Forsyth, R. Allyn
APPLICANT: Froelich, Jamie M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQ ID NOS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
ORGANISM: E. Coli
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lo. 66;
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; ORGANISM: Caenorhabditis elegans
US-10-369-493-5849
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TYPE: PRT
; ORGANISM: Actinoplanes sp.
US-09-976-059-2
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                                                                                                                                                                                                                                                                                       US-10-029-386-33896
                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Penn, Sharron G.
APPLICANT: Penn, Sharron G.
APPLICANT: Hanzel, David K.
APPLICANT: Hanzel, David K.
APPLICANT: HANZEL, David K.
APPLICANT: HOMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR TITLE OF INVENTION: EXPRESSION ANALYSIS TWO
FILE REFERENCE: AEOMICA-X-2
CURRENT APPLICATION NUMBER: US/10/029,386
CURRENT FILING DATE: 2001-12-20
NUMBER OF SEQ ID NOS: 34288
SOFTWARE: Annomax Sequence Listing Engine vers. 1.1
SEQ ID NO 33896
LENGTH: 353
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE: THEOMATICAL AND TO 202016 1
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CURRENT FILING DATE: 2001-10-15
NUMBER OF SEQ ID NOS: 34
SOFTWARE: Patentin version 3.0
SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 33896, Application US/10029386
Publication No. US20030194704A1
GENERAL INFORMATION:
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Best Local
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APPLICANT: Zazopoulos, Emmanuel
APPLICANT: Staffa, Alfredo
TITLE OF INVENTION: Genes and Proteins for Biosynthesis of Ramoplanin
FILE REFERENCE: 3019-PCT
                                                                                                                                                                                                                                                                                                               OTHER INFORMATION: MAP TO Z93016.1
OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 1.3
OTHER INFORMATION: SWISSPROT HIT: P15387, EVALUE 5.00e-59
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65 RIFRVLK 71
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100.0%; Pred. No. 1.2e+02;
tive 0; Mismatches 0;
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5. 1.1e+02;
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                                                                                    GRGANISM: Homo sapiens
US-09-977-418-22
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CURRENT FILING DATE: 2001-10-15
PRIOR APPLICATION NUMBER: 09/584,411
PRIOR PILING DATE: 2000-05-31
PRIOR PILING DATE: 2000-05-16
PRIOR PILING DATE: 2000-03-16
PRIOR APPLICATION NUMBER: USSN 60/191,158
PRIOR APPLICATION NUMBER: USSN 60/191,158
PRIOR PILING DATE: 2000-03-22
PRIOR PILING DATE: 2000-03-26
PRIOR APPLICATION NUMBER: USSN 60/193,086
PRIOR PILING DATE: 2000-03-30
PRIOR APPLICATION NUMBER: USSN 60/201,388
PRIOR PILING DATE: 2000-03-30
PRIOR PILING DATE: 2000-03-30
PRIOR FILING DATE: 2000-03-30
PRIOR FILING DATE: 2000-03-30
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SOFTWARE: PatentIn Ver. 2
SEQ ID NO 6
                                                                                                                                                                         NUMBER OF SEQ ID NOS: 93
SOFTWARE: PatentIn Ver. 3
SEQ ID NO 22
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Publication No. US20030027158A1
GENERAL INFORMATION:
APPLICANT: Shimkets et al
TITLE OF INVENTION: No. US200300271
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Patent No. US20020155115A1
GENERAL INFORMATION:
                                             Query Match
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TITLE OF INVENTION: No. US20020155115A1el Proteins and Nuclec Acids Encoding Same
FILE REFERENCE: 15966-697 CIP
CURRENT APPLICATION NUMBER: US/09/808,602
CURRENT FILING DATE: 2001-03-14
ERIOR APPLICATION NUMBER: 09/800,198
PRIOR PILING DATE: 2001-03-05
PRIOR PILING DATE: 2001-03-05
PRIOR PILING DATE: 2001-03-03
PRIOR FILING DATE: 2000-03-03
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                                                                                                                                     TYPE: PRT
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ORGANISM: Homo sapiens
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Local Similarity 100.0%; Fines 7; Conservative 0;
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Shimkets, Richard
Herrman, John L
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Mezes, Peter S
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  5.1%; Score 7; DB 11; Local 100.0%; Pred. No. 1.3e+02; lve 0; Mismatches 0;
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Pred. No. 1.3e+
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Best Local Similarity
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CURRENT FILING DATE: 2001-10-15
PRIOR APPLICATION NUMBER: 60/137,322
PRIOR FILING DATE: 1999-06-03
PRIOR PILING DATE: 1999-06-03
PRIOR PILING DATE: 2000-03-16
PRIOR APPLICATION NUMBER: 60/191,158
PRIOR APPLICATION NUMBER: 60/191,158
PRIOR APPLICATION NUMBER: 60/193,086
PRIOR PILING DATE: 2000-03-22
PRIOR APPLICATION NUMBER: 60/193,086
PRIOR PILING DATE: 2000-03-30
PRIOR APPLICATION NUMBER: 60/201,388
PRIOR APPLICATION NUMBER: 60/201,388
PRIOR PILING DATE: 2000-05-03
PRIOR PILING DATE: 2000-05-03
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SEQ ID NO 6
LENGTH: 381
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APPLICANT:
                                     PRIOR FILING DATE: 2000-(NUMBER OF SEQ ID NOS: 98 SOFTWARE: Patentin Ver.
                                                                                                      CURRENT APPLICATION NUMBER: US/09/800,198
CURRENT FILING DATE: 2001-03-05
PRIOR APPLICATION NUMBER: 60/186,596
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APPLICANT: Fernandes, Elma
APPLICANT: Herrman, John
APPLICANT: Vernet, Corine
TITLE OF INVENTION: No. US20030082554A1el nucleic acid sequences encoding human KIAAC
TITLE OF INVENTION: protein-like and human protein PRO228-like
TITLE OF INVENTION: polypeptides.
                                                                                                                                                                            APPLICANT: Rastelli, Luca
TITLE OF INVENTION: NOVEL PROTEINS AND NUCLEIC ACIDS ENCODING
FILE REFERENCE: 15966-697
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FILE REFERENCE: 15966-552 CON-S24
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Majumder, Kumud
Mishra, Vishna
Mezes, Peter S
Rastelli, Luca
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Shimkets, Richard A
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Best Local Similarity
Watches 7; Conserve
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US-09-800-198-6
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                                                                                                                                                                                                                                                 Sequence 22, Application US/09977639A Publication No. US20030199103A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO 22
LENGTH: 381
TYPE: PRT
ORGANISM: Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local
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                                 APPLICANT: Shimkets, Richard A
APPLICANT: Fernandes, Elma
APPLICANT: Herrman, John
APPLICANT: Vernet, Corine
TITLE OF INVENTION: No. US20030199103A1el amino acid sequences for human epidermal gra
TITLE OF INVENTION: polypeptides.
FILE REFERENCE: 15966-552 CON-S34
CURRENT APPLICATION NUMBER: US/09/977,639A
CURRENT FILING DATE: 2001-10-15
PRIOR APPLICATION NUMBER: 60/137,322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/977,751C CURRENT FILING DATE: 2001-10-15 PRIOR APPLICATION NUMBER: 60/137,322 PRIOR FILING DATE: 1999-06-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 60/193,086
PRIOR FILING DATE: 2000-03-30
PRIOR APPLICATION NUMBER: 60/201,388
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APPLICANT: Vernet, Corine
TITLE OF INVENTION: No. US20030134430A1el Amino Acid Sequences for Human Caenorhabdita
TITLE OF INVENTION: Polypeptides.
FILE REFERENCE: 15966-552 CON S-40
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PRIOR FILING DATE: 2000-05-31
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PRIOR FILING DATE: 2000-03-16
PRIOR APPLICATION NUMBER: 60/191,158
PRIOR FILING DATE: 2000-03-22
                      PRIOR FILING DATE:
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APPLICATION NUMBER: 60/189,810
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                 1999-06-03
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100.0%; Pred. No. 1.3e+02;
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|o. 1.3e+02
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APPLICANT: Fernandes, Richard A
APPLICANT: Vernet, Corine
APPLICANT: Vernet, Corine
APPLICANT: Vernet, Corine
TITLE OF INVENTION: No. US20040002134A1el nucleic acid sequences encoding human KIAAC
TITLE OF INVENTION: Polypetides.
TITLE OF INVENTION: polypetides.
FILE REFERENCE: 15966-552 CON-S26
CURRENT APPLICATION NUMBER: US/09/977,819B
CURRENT FILING DATE: 2001-10-15
PRIOR APPLICATION NUMBER: 60/137,322
PRIOR APPLICATION NUMBER: 60/189,810
PRIOR APPLICATION NUMBER: 60/189,810
PRIOR APPLICATION NUMBER: 60/191,158
PRIOR APPLICATION NUMBER: 60/191,158
PRIOR APPLICATION NUMBER: 60/91,158
PRIOR APPLICATION NUMBER: 60/91,386
PRIOR APPLICATION NUMBER: 60/201,388
PRIOR APPLICATION NUMBER: 60/201,388
PRIOR APPLICATION NUMBER: 60/201,388
PRIOR FILING DATE: 2000-05-03
PRIOR PILING DATE: 2000-05-03
PRIOR APPLICATION NUMBER: 60/201,388
PRIOR FILING DATE: 2000-05-03
PRIOR FILING DATE: 2000-05-03
PRIOR FILING DATE: 2000-05-03
PRIOR FILING DATE: 2000-05-03
                                        RESULT 35
US-09-826-212-6
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LENGTH: 381
TYPB: PRT
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Sequence 6, Application US/09826212 Patent No. US20010021516A1
                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQ ID NOS: 92
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 22
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PRIOR FILING DATE: 2000-05-03
PRIOR APPLICATION NUMBER: 09/584,411
PRIOR FILING DATE: 2000-05-31
NUMBER OF SEQ ID NOS: 92
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PRIOR FILING DATE: 2000-03-22
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5.1%; Score 7; DB
Local Similarity 100.0%; Pred. No. 1.
hes 7; Conservative 0; Mismatches
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                                                                                                                                   233 LLLAILL 239
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100.0%; Pred. No.
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No. 1.3e+02;
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o. 1.3e+02;
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RESULT 36
US-09-907-372-20
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-826-212-6
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Patent No. US20020150583A1
GENERAL INFORMATION:
APPLICANT: Human Genome Sciences,
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SOFTWARE: PERL Program
SEQ ID NO 20
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SOFTWARE: PatentIn version 3.0
SEQ ID NO 6
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Best Local Similarity 100.0%;
Matches 7; Conservative
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APPLICANT: Human Genome Sciences, Inc.
TITLE OF INVENTION: Tumor Necrosis Factor Receptors 6 Alpha and 6 Beta
FILE REFERENCE: PF454P2
CURRENT APPLICATION NUMBER: US/09/935,727
CURRENT FILING DATE: 2001-08-24
PRIOR APPLICATION NUMBER: 60/303,224
PRIOR FILING DATE: 2001-07-06
PRIOR APPLICATION NUMBER: 60/252,131
PRIOR APPLICATION NUMBER: 60/252,131
PRIOR APPLICATION NUMBER: 60/252,131
PRIOR FILING DATE: 2000-11-21
PRIOR FILING DATE: 2000-11-21
PRIOR FILING DATE: 2000-08-25
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TITLE OF INVENTION: Tumor Necrosis Factor Receptor 5
FILE REFERENCE: 1488.1280006
CURRENT APPLICATION NUMBER: US/09/826,212
CURRENT FILING DATE: 2001-04-05
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APPLICANT: Warren, Bridget A.
TITLE OF INVENTION: TWF RECEPTOR 2 RELATED PROTEIN VARIANT
FILE REFERENCE: PC-0050 US
CURRENT APPLICATION NUMBER: US/09/907,372
CURRENT FILING DATE: 2001-07-27
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APPLICANT: Gentz, Reine
APPLICANT: Ruben, Steven
APPLICANT: Ni, Jian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: misc_feature
OTHER INFORMATION: Incyte ID No. US20020068242A1 g600223
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
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les 7; Conserv
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Ruben, Steven
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100.0%; Pred. No. 1.4)
lve 0; Mismatches
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o. 1.4e+02;
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PRIOR APPLICATION NUMBER: 09/518,931

FILING DATE: 2000-03-03 APPLICATION NUMBER: 60/168,235 FILING DATE: 1999-12-01

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; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-935-727-8
                                                                                                      US-10-186-643-6
                                                                                                                        RESULT 39
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Sequence 6, Application US/10186643
Publication No. US20030118546A1
GENERAL INFORMATION:
APPLICANT: Wei, Ying-Fei
APPLICANT: Ni, Jian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20, Application US/09917372
publication No. US20030068619A1
GENERAL INFORMATION:
APPLICANT: Lal, Preeti G.
APPLICANT: Warren, Bridget A.
TITLE OF INVENTION: TMF RECEPTOR 2 RELATED PROTEIN VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQ ID NOS: 20
SOFTWARE: PERL Program
SEQ ID NO 20
LENGTH: 415
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CURRENT FILING DATE: 2002-09-09
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SOFTWARE: PatentIn Ver. 2.1
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NAME/KEY: misc feature
OTHER INFORMATION: Incyte ID No. US20030068619A1 g600223
                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
ORGANISM: Mus musculus
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DR APPLICATION NUMBER: 60/121,774
DR FILING DATE: 1999-03-04
DR APPLICATION NUMBER: 09/006,352
DR FILING DATE: 1998-01-13
DR APPLICATION NUMBER: 60/035,496
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FILING DATE: 1999-04-30
APPLICATION NUMBER: 60/131,270
FILING DATE: 1999-04-27
APPLICATION NUMBER: 60/124,092
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o. 1.4e+
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GENERAL INFORMATION:
APPLICANT: Shimkets, Richard A.

Fernandes, Elma Herrmann, John

Smithson, Glennda Yang, Meijia Boldog, Ference Liu, Xiaohong

APPLICANT: APPLICANT: APPLICANT:

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Query Match
Best Local Similarity
""" hes 7; Conserva
                                                                                                                                                                                                                                                                                             ; TYPE: PRT ; ORGANISM: Streptomyces avermitilis US-10-156-761-10904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-156-761-10904
                                             US-10-098-871-8
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                                                                                                                                                                                                                                                                                                                                                   SEQ ID NO 10904
LENGTH: 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
APPLICANT: OMURA, SATOSHI
APPLICANT: IKEDA, HARUO
APPLICANT: ISHIKAWA, JUN
Sequence 8, Application US/10098871 Publication No. US20030198958A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 10904, Application US/10156761 Publication No. US20030119018A1
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Matches 7; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Gentz, Reiner
APPLICANT: Ruben, Steven
TITLE OF INVENTION: Tumor Necrosis Factor Receptor 5
FILE REFERENCE: 1488.1280004
CURRENT APPLICATION NUMBER: US/10/186,643
CURRENT FILING DATE: 2002-07-02
PRIOR APPLICATION NUMBER: US/09/573,986
PRIOR PILICATION NUMBER: US/09/573,986
PRIOR FILING DATE: 2000-05-18
NUMBER OF SEQ ID NOS: 27
                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/10/156,761
CURRENT FILING DATE: 2002-05-29
PRIOR APPLICATION NUMBER: JP 2001-204089
PRIOR FILING DATE: 2001-05-30
PRIOR APPLICATION NUMBER: JP 2001-272697
PRIOR FILING DATE: 2001-08-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: SHIBA, TĀDAYOSHI
APPLICANT: SAKAKI, YOSHIYUKI
APPLICANT: HATTORI, MASAHIRA
TITLE OF INVENTION: NOVEL POLYNUCLBOTIDES
                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 15109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILE REFERENCE: 249-262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 415
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                           335 LLLAILL 341
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HORIKAWA, HIROSHI
                                                                                                                                                                                                             Conservative
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                                                                                                                                                                                                                                  5.1%; Score 7; DB 15; 100.0%; Pred. No. 1.4e+02
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                                                                                                                                                                                                                                                   Length 417;
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; Sequence 2349, Application US/10094749
Publication No. US20030219741A1
; GENERAL INFORMATION:
; APPLICANT: ISOGAI, TAKAO
; APPLICANT: SUGIYAMA, TOMOYASU
; APPLICANT: OTSUKI, TETSUJI
; APPLICANT: WAKAMATSU, AI
; APPLICANT: WAKAMATSU, AI
; APPLICANT: ISHII, SHIZUKO
                                                                                                                                                                                                                                                                                                                         밁
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US-10-108-260A-3238
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US-10-094-749-2349
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JS-10-108-260A-3238
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CURRENT FILING DATE: 2002-11-26
PRIOR APPLICATION NUMBER: 09/659,634
PRIOR FILING DATE: 2000-09-12
PRIOR FILING DATE: 12000-09-13
PRIOR PPLICATION NUMBER: 60/153,629
PRIOR PILING DATE: 1999-09-13
PRIOR APPLICATION NUMBER: 60/154,762
PRIOR FILING DATE: 1999-09-16
PRIOR FILING DATE: 1999-09-16
PRIOR FILING DATE: 1999-09-16
PRIOR FILING DATE: 1999-09-20
PRIOR FILING DATE: 1999-09-20
PRIOR FILING DATE: 1999-09-20
PRIOR APPLICATION NUMBER: 60/159,231
PRIOR APPLICATION NUMBER: 60/276,960
PRIOR FILING DATE: 2001-03-19
PRIOR FILING DATE: 2001-03-19
PRIOR FILING DATE: 2010-03-19
PRIOR FILING DATE: 2011-03-19
PRIOR FILING DATE: 2011-03-19
PRIOR FILING DATE: 2011-03-19
PRIOR FILING DATE: 2011-03-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/10/108,260A
CURRENT FILING DATE: 2002-03-27
NUMBER OF SEQ ID NOS: 5458
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 3238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 3238, Application US/10108260A
Publication No. US20040005560A1
GENERAL INFORMATION:
APPLICANT: HELLX RESEARCH INSTITUTE
TITLE OF INVENTION: No. US20040005560A1e1 full length cDNA
FILE REFERENCE: H1-A0106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 461
TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ENGTH: 429
                                                                                                                                                                                                                                                                                                                                                                                                                  y Match 5.1%; Score 7; DB 12; Lucal Similarity 100.0%; Pred. No. 1.5e+02; hes 7; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                       114 ALQLLLA 120
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No. 1.4e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 461;
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Query Match
Best Local Similarity
Thes 7; Conserve
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APPLICANT: Microbial Technics Limited
APPLICANT: Gilbert, Christophe FG
APPLICANT: Hansbro, Philip M
TITLE OF INVENTION: Proteins
FILE REFERENCE: PWC/P21129WO
CURRENT APPLICATION NUMBER: US/09/769,787
CURRENT FILING DATE: 2001-01-26
PRIOR APPLICATION NUMBER: GB 9816337.1
PRIOR APPLICATION NUMBER: US 60/125164
PRIOR FILING DATE: 1998-03-19
PRIOR FILING DATE: 1999-03-19
NUMBER OF SEQ ID NOS: 388
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US-09-769-787-80
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-094-749-2349
                                                                                                                                      ; ORGANISM: Streptococcus pneumoniae US-09-769-787-80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: NAGAHARI, KENJI
APPLICANT: MASUHO, YASUHIKO
TITLE OF INVENTION: NOVEL FULL-LENGTH CDNA
FILE REFERENCE: 084335/0160
CURRENT APPLICATION NUMBER: US/10/094,749
CURRENT FILING DATE: 2002-03-12
PRIOR APPLICATION NUMBER: 60/350,435
PRIOR FILING DATE: 2002-01-24
PRIOR FILING DATE: 2002-01-24
                                                                                                                                                                                 SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 80
LENGTH: 506
                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 80, Application US/09769787 Publication No. US20030091577A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: JP 2001-328381
PRIOR FILING DATE: 2001-09-14
NUMBER OF SEQ ID NOS: 3381
SOFTWARE: PATENTIN Ver. 2.1
SEQ ID NO 2249
SEQ ID NO 2249
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Best Local
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APPLICANT:
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                                                                                                                                                                          TYPE: PRT
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30
                                10 LLLAILL 16
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LLLAILL 36
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NAGAI, KEIICHI
IRIE, RYOTARO
TAMECHIKA, ICHIRO
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YOSHIKAWA, TSUTOMU
OTSUKA, MOTOYUKI
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ISONO, YUUKO
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YURI
                                                                  Conservative
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                                                100.0%; Preu.
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100.0%; Pred. No.
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                                                                                                Length 506;
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RESULT 45 US-10-114-893-10 ; Sequence 10, Application US/10114893

Publication No.

US20020193567A1

GENERAL

INFORMATION:

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RESULT 47
US-10-170-789-28
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US-10-114-893-10
                                                                                                                                                                                                                                                                                        ; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-861-801-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Jacobs, Kenneth
APPLICANT: McCoy, John M.
APPLICANT: LaVallie, Edward R.
APPLICANT: Collins Racie, Lisa A.
APPLICANT: Evans, Cheryl
APPLICANT: Merberg, David
                                                                                                                                                                                           Query Match
Best Local Similarity
7; Conserva
Sequence 28, Application US/10170789 Publication No. US20030180930A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 2
LENGTH: 917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 2, Application US/09861801 Patent No. US20020009779A1
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                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Meyers, Rachel A.
APPLICANT: Williamson, Mark
TITLE OF INVENTION: 50365, A NOVEL HEXOKINASE FAMILY MEMBER
TITLE OF INVENTION: AND USES THEREFOR
FILE REFERENCE: 10448-055001
CURRENT APPLICATION NUMBER: US/09/861,801
CURRENT FILING DATE: 2001-05-21
PRIOR APPLICATION NUMBER: US 60/205,508
PRIOR PILING DATE: 2000-05-19
NUMBER OF SEQ ID NOS: 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/10/114,893
CURRENT FILING DATE: 2002-04-02
EARLIER APPLICATION NUMBER: 09/413,232
EARLIER FILING DATE: 1999-10-06
NUMBER OF SEQ ID NOS: 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Treacy, Maurice
APPLICANT: Bowman, Michael R.
APPLICANT: Spaulding, Vikki
APPLICANT: Carlin-Duckett, McKeough
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Kelleher, Kerry S.

APPLICANT: Genetics Institute, Inc.

IITLE OF INVENTION: SECRETED PROTEINS AND POLYNUCLEOTIDES ENCODING THEM PILE REFERENCE: GI 6000-10A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT
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Local Similarity 100.0%; Pred. No. 2e-
les 7; Conservative 0; Mismatches
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                                                                                                                                     90 FRVLKVQ 96
                                                                                                                                                           67 FRVLKVQ 73
                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                               5.1%; Score 7; DB
100.0%; Pred. No. 2.
tive 0; Mismatches
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Pred. No.
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lo. 2e+02;
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ORGANISM: Homo
US-10-170-789-28
                                                                                                           SOPTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 28
LENGTH: 917
TYPE: PRT
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                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: US 60/187,420 PRIOR FILING DATE: 2000-03-07 NUMBER OF SEQ ID NOS: 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR FILING DATE: 2001-05-21
PRIOR APPLICATION NUMBER: PCT/US01/16549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: US 60/186,061
PRIOR FILING DATE: 2000-02-29
PRIOR APPLICATION NUMBER: US 09/882,166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: US 09/797,039
PRIOR FILING DATE: 2001-02-28
PRIOR APPLICATION NUMBER: PCT/US01/06525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: NOVEL HUMAN PROTEIN KINASE, PHOSPHATASE, TITLE OF INVENTION: AND PROTEASE FAMILY MEMBERS AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Rachel E. Meyers
APPLICANT: Olandt, Peter J.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILE REFERENCE: 10448-191001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR FILING DATE: 2001-02-28
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 60/205,508 FILING DATE: 2000-05-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US 60/226,740 FILING DATE: 2000-08-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 09/934,406 FILING DATE: 2001-08-21
                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: PCT/US01/07074
                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 09/801,275
                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 60/246,561
                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 2001-11-07
                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US 10/045,367
                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US 60/235,023 FILING DATE: 2000-09-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: PCT/US01/29904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US 09/961,721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 2001-04-11
APPLICATION NUMBER: US 60/197,508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: PCT/US01/40483
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Curtis , Rory A. J.
                                                                                        sapiens
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Score 7; DB 12; L
Pred. No. 2.7e+02;
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                     Length 917;
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Query Match Best Local Similarity

100.0%;

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RESULT 49
US-10-262-794A-53
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US-10-108-260A-2966
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/10/108,260A
CURRENT FILING DATE: 2002-03-27
NUMBER OF SEQ ID NOS: 5458
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 2966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 2966, Application US/10108260A
Publication No. US20040005560A1
GENERAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
TITLE OF INVENTION: No. US20040005560A:
FILE REFERENCE: H1-A0106
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TYPE: PRT
ORGANISM: Homo sapiens
    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/262,794A
FILING DATE: 02-OCT-2002
                                                                                                                                                                                                                                                                                       APPLICANT:
APPLICANT:
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APPLICANT:
APPLICANT:
APPLICANT:
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APPLICANT:
APPLICANT:
                                                                                                                                                                                                                          NUMBER OF SEQUENCES: E
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                                                                                                                                                                 STREET: yasv __ CITY: Indianapolis
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                                                                                                                                    ZIP:
                                                                                                                                                  COUNTRY:
CLASSIFICATION:
                                                                                                                                                                                                             ADDRESSEE:
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                                                                                                                                    46268
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                                                                                                                                                                                             B: Dow AgroSciences Patent Department
9330 Zionsville Road
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Sukhapinda, Kitisri
                                                                                                                                                                                                                                                                                                         Guo,
                                                                                                                                                                                                                                                                                                                    Roberts, Jean L.
Strickland, James A.
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Bowen, David J
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Fatig, Raymond
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Blackburn, Michael B.
                                                                                                                                                                                                                                                                                                                                                                                                                                            Schoonover, Sue
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                                                                                                                                                                                                                                                                                                                                                  Gregory L.
                                                                                                                                                                                                                                                         Insecticidal Protein Toxins From Photorhabdus
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Query Match
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Publication No
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                                                                                                                                                                                                                                                                                              APPLICANT:
                                                ZIP: 46268
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                NUMBER OF SEQUENCES: 88
CORRESPONDENCE ADDRESS:
ADDRESSEE: DowElanco
STREET: 9330 Zionsville Road
                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
NAME: Seay, Nicholas J
REGISTRATION NUMBER: 27386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/007,255
FILING DATE: 06-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/608,423
APPLICATION NUMBER: US 08/608,423
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TELECOMMUNICATION INFORMATION:
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APPLICATION NUMBER: 1
FILING DATE: 28-AUG-
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APPLICATION NUMBER:
                                                                                                                                                                                                               TITLE OF INVENTION: Insecticidal TITLE OF INVENTION: Photorhabdus
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOPTWARE: Patentin Release #1.0, Version #1.30
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                                                                                                 COUNTRY:
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                                                                                                                                  Indianapolis
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No. US20030113323A1
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Bowen, David J
Petell, James
Fatig, Raymond
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Rocheleau, Thomas A
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28-AUG-1996
                                                   Floppy disk
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05-MAY-1997
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                                                                                                                                                                                                                                                                                                                 Richard
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o. 5e+02;
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/242,056
FILING DATE:
CLASSIFICATION:

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CLASSIFICATION NUMBER: US 08/063,615
PRIOR APPLICATION NUMBER: US 08/063,615
PRIOR APPLICATION NUMBER: US 08/395,497
PRIOR APPLICATION NUMBER: US 08/395,497
PRIOR APPLICATION NUMBER: US 08/007,255
PRIOR APPLICATION NUMBER: US 08/007,255
PRIOR APPLICATION NUMBER: US 08/007,255
PRIOR APPLICATION NUMBER: US 08/008,423
PRILING DATE: 28-FEB-1996
PRIOR APPLICATION NUMBER: US 08/705,484
PRILING DATE: 28-FEB-1996
PRIOR APPLICATION NUMBER: US 08/705,484
PRILING DATE: 28-FEB-1996
PRIOR APPLICATION NUMBER: US 08/743,699
PRILING DATE: 28-FEB-1996
PRIOR APPLICATION NUMBER: US 08/743,699
PRILING DATE: 28-FEB-1996
ATTOCHET/ACRIT INFORMATION:
NAME: BOTICKL, Andrea T.
REGISTRATION WUMBER: 5301E
TELECOMMUNICATION INFORMATION:
TELEPHONE: 317-337-4847
INFORMATION FOR SEQ ID NO: 53:
SEQUENCE CHARACTERISTICS:
LEMGTH: 1644 amino acids
TELECOMMUNICATION INFORMATION:
TELEPHONE: 317-337-4847
INFORMATION FOR SEQ ID NO: 53:
SEQUENCE CHARACTERISTICS:
LEMGTH: 1644 amino acids
TELECOMMUNICATION INFORMATION:
TELEPHONE: 317-337-4847
INFORMATION FOR SEQ ID NO: 53:
SEQUENCE CHARACTERISTICS:
LEMGTH: 1644 amino acids
TELECOMMUNICATION INFORMATION:
TELEPHONE: 317-337-4847
INFORMATION FOR SEQ ID NO: 53:
SEQUENCE CHARACTERISTICS:
LEMGTH: 1644 amino acids
TELECOMMUNICATION INFORMATION:
TELEPHONE: 317-337-4847
INFORMATION FOR SEQ ID NO: 53:
SEQUENCE CHARACTERISTICS:
LEMGTH: 1644 amino acids
TELECOMMUNICATION INFORMATION:
TELEPHONE: 317-337-4847
INFORMATION FOR SEQ ID NO: 53:
SEQUENCE CHARACTERISTICS:
LEMGTH: 06: 53

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Maximum Match 100%
Listing first 45 s
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Maximum DB seq length: 200000000
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                                                                                                                                                                                                                                                                                                                                                                            Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                      Score
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1: /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1980.DAT:*
2: /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1981.DAT:*
3: /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1982.DAT:*
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5: /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1984.DAT:*
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ALIGNMENTS

AAU79852 standard; Protein; 137

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N-PSDB; ABK49522.
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Novel isolated mammalian cystatin-8 polypeptide useful for promoting

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AC AAU7
XX AU7
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XX Huma
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                  Cystatin-8; Zcys8; cancer; procoagulant protein; thrombosis; spermatogenesis; seminal fluid viscosity; cryopreserved spersperm motility; fertilisation; antigenic fragment.
   Holloway JL,
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to inhibition of
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                                                                                                                                                                                       29-AUG-2001; 2001WO-US26868.
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[]. (I) is useful for: inhibiting cancer procoagula
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Pred. No. 7.4e-75;
0; Mismatches 0;
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                                                                                                                                                                                                                                                                                        CC fluid viscosity, enhancing viability of cryopreserved sperm, sperm CC fluid viscosity, enhancing viability of cryopreserved sperm, sperm CC antibodies. Zcy88 is useful as research reagent for characterising sites CC of interaction between Zcy88 and its receptor. Zcy88 is useful in CC enhancing fertilisation during assisted reproduction in humans and in CC enhancing fertilisation during assisted reproduction in humans and in CC enhancing fertilisation during assisted reproduction in humans and in CC enhancing fertilisation during assisted reproduction in humans and in CC enhancing fertilisation during assisted reproduction in humans and in CC enhancing fertilisation during assisted reproduction in humans and in CC enhances of Zcy88. The antibodies are useful to screen biological samples like CC quantities of Zcy88 protein and DNA sequences that encode Zcy88 genes. CC The polynucleotide encoding (I) is useful to detect and to localise the CC expression of a Zcy88 gene in a biological sample and Zcy88 coligonucleotide probes are useful for in vivo diagnosis. The CC chromosomes contain a mutation in the Zcy88 gene like aneuploidy, gene CC copy number changes, insertions, deletions, restriction site changes and CC rayres, insertions deletions, restriction site changes and CC rayres, insertic alterations that inactivate the Zcy88 gene.

CC This sequence represents an antigenic fragment of human cystatin-8
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                                                                                                                                                                                                                  Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel isolated mammalian cystatin-8 polypeptide useful for promoting spermatogenesis, and inhibiting cancer procoagulant protein which leads to inhibition of thrombotic events associated with cancer
                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 2; Page 94-95; 100pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2002-383044/41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           associated with cancer; promoting spermatogenesis,
                                                                                                                                                                     Local L
                                                                                                                                                                                                                                                                                                                                     (Zcys8) .
                                                                                                                                            21
                                             81
                                                                                            μ
                                                                                                                                                                                                                Similarity
                                                                                                                        LPYQARKKTFLSVHEVMAVENYAKDSLQWITDQYNKESDDKYHFRIFRVLKVQRQVTDHL
EYHLNVEMQWTTCQKPETTNCVPQERELHKQVNCFFSVFAVPWFEQYKILNKSCSSD 117
                              BYHLNVEMQWTTCQKPETTNCVPQERELHKQVNCFFSVFAVPWFEQYKILNKSCSSD 137
                                                                                            LPYQARKKTFLSVHEVMAVENYAKDSLQWITDQYNKESDDKYHFRIFRVLKVQRQVTDHL
                                                                                                                                                                                                                                                                                      117 AA;
                                                                                                                                                                                            Conservative
                                                                                                                                                                                 87.0%; SUU
100.0%; Pr
                                                                                                                                                                                      Score 640; DB 23;
Pred. No. 3.9e-64;
0; Mismatches 0;
                                                                                                                                                                                                                                      Length 117;
                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                modulating
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                                                                                                                                                                                            Gaps
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RESULT 3
AAU79853
Cystatin-8; Zcys8; cancer; procoagulant protein; thrombosis; spermatogenesis; seminal fluid viscosity; cryopreserved sper sperm motility; fertilisation; antigenic fragment.
                                                                                                                                                 Human cystatin-8
                                                                                                                                                                   15-JUL-2002
                                                                                                                                                                                                     AAU79853 standard; Protein; 115
                                                                                                                                                                    (first entry)
                                                                                                                                                 (Zcys8) antigenic fragment
                                                                                                                                                  #1
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01-SEP-2000; 2000US-230230P 29-AUG-2001; 2001WO-US26868.

(ZYMO) ZYMOGENETICS INC

14-MAR-2002 WO200220567-A2 Homo sapiens.

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Best Local Sim:
Matches 115;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        animals. Anti-(I) antibodies are useful to screen biological samples like blood, urine, saliva, tissue biopsy and autopsy material in vitro for the presence of Zcys8. The antibodies are also useful to isolate large quantities of Zcys8 protein and DNA sequences that encode Zcys8 genes. The polynucleotide encoding (I) is useful to detect and to localise the expression of a Zcys8 gene in a biological sample and Zcys8 polynucleotide probes are useful for in vivo diagnosis. The polynucleotide encoding (I) is useful in determining whether a subject's chromosomes contain a mutation in the Zcys8 gene like aneuploidy, gene copy number changes, insertions, deletions, restriction site changes and rearrangements and genetic alterations that inactivate the Zcys8 gene.
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                                     01-SEP-2000; 2000US-230230P
                                                                                                                                              WO200220567-A2
                                                                                                                                                                                                                        spermatogenesis;
sperm motility;
                                                                                                                                                                                                                                          Cystatin-8; Zcys8; cancer; procoagulant protein; thrombosis; spermatogenesis; seminal fluid viscosity; cryopreserved sper
                                                                                                                                                                                                                                                                                                                                                                            AAU79865;
                                                                                                                                                                                                                                                                                                                                                                                                               AAU79865 standard; Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
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                                                                        29-AUG-2001; 2001WO-US26868.
                                                                                                             14-MAR-2002.
                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                       15-JUL-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This sequence represents an antigenic fragment of human cystatin-8 (Zcys8).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 2; Page 94; 100pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2002-383044/41.
 (ZYMO ) ZYMOGENETICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Holloway JL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
                                                                                                                                                                                                                                                                                                cystatin-8 (Zcys8) antigenic fragment #13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 83 HLNVEMQWTTCQKPETTNCVPQERELHKQVNCFFSVFAVPWFEQYKILNKSCSSD 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23 YQARKKTFLSVHEVMAVENYAKDSLQWITDQYNKESDDKYHFRIFRVLKVQRQVTDHLEY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HLAVEMQWITCQKPBITNCVPQBRBLHKQVNCFFSVFAVPWFEQYKILNKSCSSD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 YQARKKTELSVHEVMAVENYAKDSLQWITDQYNKESDDKYHFRIFRVLKVQRQVTDHLEY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      115 AA;
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                                                                                                                                                                                                                                                                                                                                       (first entry)
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                                                                                                                                                                                                                        fertilisation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             85.5%; Score 629;
100.0%; Pred. No.
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                                                                                                                                                                                                                      ; cryopreserved
peptide.
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[Tries equence represents an antigenic peptide of human cystatin-8
                                                                                                                                                                          Matches
                                                                                                                                                                                              Query Match
Best Local :
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                                                                                                                                                                                                                                                              Sequence
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protein in a
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Holloway JL, Gao Z,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2; Page 98; 100pp; English.
5
                                                                                                               53 QYNKESDDKYHFRIFRVLKVQRQVTDHLEYHLNVEMQWTTCQKPETTNCVPQERELHKQV
                                                                                    1 QYNKESDDKYHFRIFRVLKVQRQVTDHLBYHLNVEMQWTTCQKPBTTNCVPQERELHKQV
                                                                                                                                                                          80;
                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tide (I). (I) is useful for: inhibiting cancer procoagulant in an individual and thus inhibiting the thrombotic events
NCFFSVFAVPWFEQYKILNK 80
                        NCFFSVFAVPWFEQYKILNK 132
                                                                                                                                                                                                                                                                80
                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                              ₿
                                                                                                                                                                                            60.6%; Score 446; DB 23; 100.0%; Pred. No. 1.7e-42;
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60
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RESULT 5
AAU79866
ID AAU7
AC AAU7
XX Huma
XX Huma
XX Cyst
KW Cyst
KW Sper
XX Homo
XX H
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15-JUL-2002 (first entry)

Human cystatin-8 (Zcys8) antigenic fragment #14.

Cystatin-8; Zcys8; cancer; procoagulant protein; thrombosis; spermatogenesis; seminal fluid viscosity; cryopreserved sperm; sperm motility; fertilisation; antigenic peptide.

Homo sapiens.

WO200220567-A2

14-MAR-2002

29-AUG-2001; 2001WO-US26868.

01-SEP-2000; 2000US-230230P

(ZYMO) ZYMOGENETICS

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AAU79864
ID AAU7
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AC AAU7
AC AAU7
AC BUMA
DE HUMA
XX
KW Cyst
KW Sper
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CC This sequence represents an antigenic peptide of human cystatin-8
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Best Local :
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   Holloway JL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               spermatogenesis;
sperm motility;
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                                                                                                                                              01-SEP-2000; 2000US-230230P.
                                                                                                                                                                                                                         29-AUG-2001; 2001WO-US26868.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human cystatin-8 (Zcys8) antigenic fragment #12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15-JUL-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAU79864 standard; Peptide; 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Holloway JL,
                                                                       (ZYMO ) ZYMOGENETICS INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            59;
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Gao Z,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; seminal fluid viscosity; cryopreserved fertilisation; antigenic peptide.
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100.0%; Pred. No. 4.7e-30;
Live 0; Mismatches 0;
   Bishop PD;
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KESDDKYHFRIFRVLKVOROVTDHLEYHLNVEMOWTTCOKPETTNCVPOERE 52

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                                                                                                                                                     CC fluid viscosity, enhancing viability of cryopreserved sperm, sperm CC motility and fertilisation; and as antigenic peptides to generate CC antibodies. Zoy8 is useful as research reagent for characterising sites of interaction between Zoy8 and its receptor. Zoy8 is useful in CC enhancing fertilisation during assisted reproduction in humans and in CC enhancing fertilisation during assisted reproduction in humans and in CC enhancing the country of a Zoy8 protein and DNA sequences that encode Zoy8 genes. CC origonucleotide encoding (I) is useful to detect and to localise the country of a Zoy88 gene in a biological sample and Zoy88 genes. CC origonucleotide probes are useful for in vivo diagnosis. The CC origonucleotide probes are useful for in determining whether a subject's chromosomes contain a mutation in the Zoy88 gene like aneuploidy, gene copy number changes, insertions, deletions, restriction site changes and country sequence represents an antigenic peptide of human cystatin-8
                                                             Matches
                                                                                Query Match
Best Local
                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention describes an isolated mammalian cystatin-8 polypeptide (I) (I) is useful for: inhibiting cancer proposed in an individual and thus inhibiting the thrombot
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel isolated mammalian cystatin-8 polypeptide useful for promoting spermatogenesis, and inhibiting cancer procoagulant protein which leads to inhibition of thrombotic events associated with cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 2; Page 98; 100pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  associated with cancer; promoting spermatogenesis,
              56
                                                           1 Similarity
52; Conserv
KESDDKYHFRIFRVLKVQRQVTDHLEYHLNVEMQWTTCQKPETTNCVPQERE 107
                                                                                                                                                     52
                                                           Conservative
                                                                                                                                                     A
A
                                                                                39.1%; Score 288; DB 23; 100.0%; Pred. No. 6.1e-25;
                                                           0;
                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   inhibiting cancer procoagulant hibiting the thrombotic events
                                                                                                      Length
                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  modulating seminal
                                                                                                        52;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (Zcys8)
                                                    0;
                                                             Gaps
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RESULT 7
AAU79867
ID PAOT7
AX AAU7
XX AAU7
XX AAU7
XX Huma
XX Cyst
KW Spez
XX Homc
XX WP1-P
XX UP1-P
XX WP1-P
XX W Cystatin-8; Zcys8; cancer; procoagulant protein; thrombosis; spermatogenesis; seminal fluid viscosity; cryopreserved sperm; sperm motility; fertilisation; antigenic peptide. AAU79867 standard; Peptide; 48 WPI; 2002-383044/41 Holloway JL, Gao Z, 14-MAR-2002 Human cystatin-8 (Zcys8) antigenic fragment #15. 15-JUL-2002 (first entry) 01-SEP-2000; 2000US-230230P 29-AUG-2001; 2001WO-US26868 WO200220567-A2 Homo sapiens. ZYMOGENETICS Bishop PD;

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RESULT 8
AAU79863
ID PAOU7
XX AAU7
XX AAU7
DT 15-J
DT 15-J
XX Sper
XX Cyst
KW Sper
XX Home
XX 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            문
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        animals. Anti-(I) antibodies are useful to screen biological samples like blood, urine, saliva, tissue biopsy and autopsy material in vitro for the presence of Zcys8. The antibodies are also useful to isolate large quantities of Zcys8 protein and DNA sequences that encode Zcys8 genes. The polymucleotide encoding (I) is useful to detect and to localise the expression of a Zcys8 gene in a biological sample and Zcys8 oligonucleotide probes are useful for in vivo diagnosis. The polymucleotide encoding (I) is useful in determining whether a subject's chromosomes contain a mutation in the Zcys8 gene like aneuploidy, gene copy number changes, insertions, deletions, restriction site changes and rearrangements and genetic alterations that inactives the Zcys8 gene.
Novel isolated mammalian cystatin-8 polypeptide useful for promoting spermatogenesis, and inhibiting cancer procoagulant protein which leads to inhibition of thrombotic events associated with cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 motility and fertilisation; and as antigenic peptides to generate antibodies. Zcys8 is useful as research reagent for characterising sit of interaction between Zcys8 and its receptor. Zcys8 is useful in enhancing fertilisation during assisted reproduction in humans and in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           protein in an in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cystatin-8; Zcys8; cancer; procoagulant protein; thrombosis; spermatogenesis; seminal fluid viscosity; cryopreserved sper
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAU79863 standard; Peptide; 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             polypeptide (I). (I) is useful for: inhibiting cancer procoagulant protein in an individual and thus inhibiting the thrombotic seems associated with cancer; promoting spermatogenesis, modulating sent fluid viscosity, enhancing viability of cryopreserved sperm, sperm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel isolated mammalian cystatin-8 polypeptide useful for promoting spermatogenesis, and inhibiting cancer procoagulant protein which leads to inhibition of thrombotic events associated with cancer -
                                                                                                                           WPI; 2002-383044/41.
                                                                                                                                                                                                                                                                                                                  01-SEP-2000; 2000US-230230P
                                                                                                                                                                                                                                                                                                                                                                            29-AUG-2001; 2001WO-US26868
                                                                                                                                                                                                                                                                                                                                                                                                                                             14-MAR-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sperm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human cystatin-8 (Zcys8) antigenic fragment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15-JUL-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAU79863;
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                                                                                                                                                                                   Holloway JL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention describes an isolated mammalian cystatin-8 (2cys8)
                                                                                                                                                                                                                                                    (OMYZ)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sequence represents an antigenic peptide of human cystatin-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             motility;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                85 NVEMONTTCOKPETTNCVPQERELHKQVNCFFSVFAVPNFEQYKILNK 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 NVEMONTTCOKPETTNCVPOERELHKOVNCPPSVPAVPWPEQYKILNK 48
                                                                                                                                                                                                                                                    ZYMOGENETICS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                48 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                      Gao Z,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             fertilisation;
                                                                                                                                                                                                                                                    INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%;
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                                                                                                                                                                                      Bishop
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 273; pred. No.
                                                                                                                                                                                      PD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          antigenic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2.7e-23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; cryopreserved sperm;
peptide.
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RESULT 9
ABG48915
ID ABG4
XX A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CC The invention describes an isolated mammalian cystatin-8 (Zcys8)
CC polypeptide (I). (I) is useful for: inhibiting cancer procoagulant
CC protein in an individual and thus inhibiting the thrombotic events
CC associated with cancer; promoting spermatogenesis, modulating seminal
CC fluid viscosity, enhancing viability of cryopreserved sperm, sperm
CC motility and fertilisation; and as antigenic peptides to generate
CC antibodies. Zcys8 is useful as research reagent for characterising sites
CC of interaction between Zcys8 and its receptor. Zcys8 is useful in
CC enhancing fertilisation during assisted reproduction in humans and in
CC enhancing fertilisation during assisted reproduction in humans and in
CC enhancing fertilisation during assisted reproduction in humans and in
CC enhances. Anti-(I) antibodies are useful to screen biological samples like
CC blood, urine, saliva, tissue biopsy and autopsy material in vitro for the
CC presence of Zcys8. The antibodies are also useful to isolate large
CC quantities of Zcys8 protein and DNA sequences that encode Zcys8 genes.
CC The polynucleotide encoding (I) is useful to detect and to localise the
CC expression of a Zcys8 gene in a biological sample and Zcys8
CC colyonosomes contain a mutation in the Zcys8 gene like aneuploidy, gene
CC chromosomes contain a mutation in the Zcys8 gene like aneuploidy, gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
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26-MAY-2000; 2000US-0508408.
30-JUN-2000; 2000US-0508408.
03-AUG-2000; 2000US-053366.
21-SEP-2000; 2000US-0234587.
27-SEP-2000; 2000US-0236599.
04-OCT-2000; 2000GB-0024263.
Human genome-derived single exon nucleic acid probes useful for
                                                                      WPI; 2001-488898/53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30-JAN-2001; 2001WO-US00664.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; liver; cirrhosis; hyperlipoproteinaemia; hyperlipidaemia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human liver peptide, SEQ ID No 27563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-FEB-2003 (first entry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABG48915 standard; Peptide; 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200157273-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hypercholesterolaemia; coronary heart disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 2; Page 97-98; 100pp; English
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                                                                                                                                                                                                   (MOLE-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local
                                                                                                                                SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          52 DQYNKESDDKYHFRIFRVLKVQRQVTDHLEYHLNVEMQWTTCQKPETTN 100
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49; Conserv
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                                                                                                                                                                                                MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DQYNKESDDKYHFRIFRVLKVQRQVTDHLEYHLNVEMQWTTCQKPETTN
                                                                                                                                Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  49
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                                                                                                                                Chen W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 272; DB; Pred. No. 3.6
                                                                                                                                       Rank DR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3.6e-23;
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RESULT 10
ABB28913
ID ABB28913
AC ABB28
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to a single exon nucleic acid probe (SENP) (I) for measuring human gene expression in a sample derived from human adult liver, comprising one of 13109 defined nucleotide sequences given in the specification (or complements/ fragments). The probe hybridises at high stringency to a nucleic acid molecule expressed in the human adult liver. (I) may be used for predicting, measuring and displaying gene expression in samples derived from human adult liver. The genes dentified may be involved in genetic liver diseases such as cirrhosis, hyperlipoproteinaemia, hyperlipidaemia and hypercholesterolaemia which is associated with coronary heart disease. ABG47348-ABG5930 represent human liver single exon encoded peptides of the invention.

Note: The sequence information for this patent does not appear in the printed specification but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
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Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         04-FEB-2000;
26-MAY-2000;
30-JUN-2000;
03-AUG-2000;
                                                                                                                                         New spatially-addressable set of single exon nucleic acid probes, useful for measuring gene expression in sample derived from human breast, comprises number of single exon nucleic acid probes -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; microarray; single exon probe; gene expression; breast;
disease; cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim
The invention relates to a spatially-addressable set of single exon nucleic acid probes for measuring gene expression in a sample derived
                                                                                                                                                                                                                                                                 WPI; 2001-496933/54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-JAN-2001; 2001WO-US00662
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Peptide #1564 encoded by breast cell single exon nucleic acid probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABB28913
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
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                                                                                      Claim 27;
                                                                                                                                                                                                                                                                                                                                                                                  (MOLE-)
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27-SEP-2000;
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                                                                                                                                                                                                                                                                                                                      SG,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ch 35.6%; Scoll Similarity 100.0%; Po 50; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                  MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                                                                                      Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           50 AA;
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; 2000US-0207456.
; 2000US-0608408.
; 2000US-0632366.
; 2000US-0234687.
; 2000US-0236359.
                                                                                                                                                                                                                                                                                                                                                                                                                                        2000GB-0024263.
                                                                                         ID NO
                                                                                      11881;
                                                                                                                                                                                                                                                                                                                      Chen W,
                                                                                   327pp + sequence
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k; Pred. No. 4.9
0; Mismatches
                                                                                                                                                                                                                                                                                                                         Rank DR;
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hes 0;
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RESULT 11
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Best Local 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          from human breast and BT 474 cells. The method involves contacting the probes with a collection of detectably labelled nucleic acids derived from mRNA of human breast, and then measuring the label bound to each probe of the microarray. The probes are useful for verifying the expression of regions of genomic DNA predicted to encode proteins. They are useful for gene discovery, and for determining predisposition and/or prognosing breast disease. Gene expression analysts is useful for assessing the toxicity of chemical agents on cells. The microarray of this invention presents a far greater diversity of probes for measuring gene expression, with far less bias than expressed sequence tag microarrays. The method is suitable for rapid production of functional information from genomic sequence. The present sequence is a peptide encoded by a single exon nucleic acid
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26-MAY-2000;
30-JUN-2000;
03-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        probe of the invention:
Note: The sequence data for this patent did not form part of the
printed specification, but was obtained in electronic format directly
from WIPO at ftp.wipo.int/pub/published_pct_sequences.
                                                                                      New spatially-addressable set of single exon nucleic acid probes, useful for measuring gene expression in sample derived from humar breast, comprises number of single exon nucleic acid probes -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-FEB-2002 (first entry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABB32389 standard; Peptide; 50
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                                                                                                                                                                                                                                                                                                                                                                       30-JAN-2001; 2001WO-US00662
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              disease; cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Peptide #5040 encoded by breast cell single exon nucleic acid probe.
                                                                                                                                                       WPI; 2001-496933/54.
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27-SEP-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; microarray; single exon probe; gene expression;
                                                                                                                                                                                                                 (MOLE-) MOLECULAR DYNAMICS INC.
                                                                                                                                                                                    SG,
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2000US-0632366
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2000US-0236359.
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2000US-0207456
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The invention relates to a spatially-addressable set of single exon nucleic acid probes for measuring gene expression in a sample derived from human breast and BT 474 cells. The method involves contacting

Claim 27; SEQ ID NO 15357; 327pp + sequence listing; English.

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RESULT 12
ABB34086
ID ABB34086
AC ABB34
XX ABB34086
AC ABB34
XX Pept:
XX Pept:
XX Huma
XX Huma
XX Homc
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XX W 92
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Matches 50; Conserv
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21-SEP-2000;
27-SEP-2000;
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                                 The invention relates to a single exon nucleic acid probe for measuring human gene expression in a sample derived from human foetal liver. The single exon nucleic acid probes may be used for predicting, measuring and displaying gene expression in samples derived from human fetal liver. The present sequence is a peptide encoded by a single exon the probability of the present sequence is a peptide encoded by a single exon the probability of the present sequence is a peptide encoded by a single exon the probability of the present sequence is a peptide encoded by a single exon the probability of the
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26-MAY-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                  genome-derived single exon nucleic acid probes useful zing gene expression in human fetal liver -
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                                                                                                                                                                                                                                                                                                                               27; SEQ ID NO 26721; 639pp + sequence listing;
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; 2000US-0207456.
; 2000US-0608408.
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100.0%; Pr
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4.9e-22;
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Best Local (
                                     The present invention relates to single exon nucleic acid probes for measuring human gene expression in a sample derived from human heart (see ABA21355-ABA41305). The present sequence is a protein encoded by one such probe. The probes may be used for predicting, measuring and displaying gene expression in samples derived from the human heart via microarrays. By measuring gene expression, the probes are useful for predicting, diagnosing, grading, staging, monitoring and prognosing diseases of the human heart and vascular system e.g. cardiovascular disease, hypertension, cardiac arrhythmias and congenital heart disease, hypertension, cardiac arrhythmias and congenital heart of the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                    26-MAY-2000;
30-JUN-2000;
03-AUG-2000;
21-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; gene expression; heart; microarray; vascular system; cardiovascular disease; hypertension; cardiac arrhythmia; congenital heart disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Note: The sequence data for this patent did not form printed specification, but was obtained in electronic from WIPO at ftp.wipo.int/pub/published_pct_sequences.
                            at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                Claim 15; SEQ ID No 21294; 530pp; English
                                                                                                                                                                                                                                            Single exon nucleic acid hearts -
                                                                                                                                                                                                                                                                                       WPI; 2001-488899/53
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Protein #1523 encoded by probe for measuring heart cell gene expression.
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                                                                                                                                                                                                                                                                                                                                                MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RKKTFLSVHEVMAVENYAKDSLQWITDQYNKESDDKYHFRIFRVLKVQRQ
                                                                                                                                                                                                                                                                                                                  Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          50 AA;
                                                                                                                                                                                                                                                                                                                                                                                       2000US-0207456.
2000US-0608408.
2000US-0632366.
2000US-0234687.
2000US-0236359.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                           2000GB-0024263.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                35.6%; Score 100.0%; Pred.
                                                                                                                                                                                                                                                                                                                  Chen W,
                                                                                                                                                                                                                                                          probes for analyzing gene expression in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                    Rank DR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   . No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.9e-22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    did not form part of the in electronic format directly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  50
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                                                                                                                                                          such
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Query Match Best Local Similarity

35.6%;

Score 262; Pred. No.

DB 22; 4.9e-22;

Length 50;

Sequence

50

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RESULT 14
AAMS4871
ID AAMS4
AC AAM4
AC AAM44
AC 
                                                                                        RESULT 15
AAM67252
# K K E
                                                                                                                                                                                                                               8
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Best Local S
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26-MAY-2000;
30-JUN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                   probes which are derived from genomic sequences expressed in the human brain. They can be used to measure gene expression in brain cell samples, which may enable the diagnosis and improved treatment of nervous system diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia, epilepsy and cancers. The present sequence is a protein encoded by one of the probes of the invention.
                      AAM67252
                                                                    AAM67252 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention provides a number of single exon nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Single exon nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2001-483446/52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            03-AUG-2000;
21-SEP-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; brain expressed exon; gene expression analysis; microarray; Alzheimer's disease; multiple sclerosis; so
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human brain expressed single exon probe encoded protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             05-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAM54871;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAM54871 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30-JAN-2001; 2001WO-US00667.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200157275-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4; SEQ ID NO:
                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                            RKKTFLSVHEVMAVENYAKDSLQWITDQYNKESDDKYHFRIFRVLKVQRQ 75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RKKTFLSVHEVMAVENYAKDSLQMITDQYNKESDDXYHFRIFRVLKVQRQ 75
                                                                                                                                                                                   RKKTFLSVHEVMAVENYAKDSLOWITDQYNKESDDKYHFRIFRVLKVQRQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hanzel
                                                                                                                                                                                                                                                                                                                                                                              50 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; 2000US-0180312.
2000US-0207456.
2000US-0608408.
2000US-0632366.
2000US-0234687.
2000US-0236359.
2000US-024263.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
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                                                                                                                                                                                                                                                                         35.6%; but
100.0%; Pr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              26976; 650pp + Sequence Listing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chen
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                                                                                                                                                                                                                                                                                 Score 262; DB 22; ; Pred. No. 4.9e-22; 0; Mismatches 0;
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schizophrenia;
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26-MAY-2000; 2000US-0207456.

30-JUN-2000; 2000US-0608408.

03-AUG-2000; 2000US-0632366.

21-SEP-2000; 2000US-0234687.

27-SEP-2000; 2000US-023659.

04-OCT-2000; 2000GB-0024263.
                                                                                                                        The present invention provides a number of single exon nucleic acid probes which are derived from genomic sequences expressed in the human bone marrow. They can be used to measure gene expression in bone marrow samples, which may enable the improved diagnosis and treatment of cancers such as lymphoma, leukaemia and myeloma. The present sequence is a protein encoded by one of the probes of the invention.
                                                                                                  Sequence
                                                                                                                                                                                                                                           Human genome-derived single exon nucleic acid probes useful analyzing gene expression in human bone marrow -
                                                                                                                                                                                                                                                                                   WPI; 2001-488900/53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-JAN-2001; 2001WO-US00668
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   microarray;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human bone marrow expressed probe encoded protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   06-NOV-2001
                                                                                                                                                                                                                    Example 4; SEQ ID NO: 27558; 658pp + Sequence Listing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200157276-A2.
                                                                                                                                                                                                                                                                                                                                    (MOLE-) MOLECULAR DYNAMICS INC.
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                                                 50;
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             RKKTFLSVHEVMAVENYAKDSLQWITDQYNKESDDKYHFRIFRVLKVQRQ
RKKTFLSVHEVMAVENYAKDSLQWITDQYNKESDDKYHFRIFRVLKVQRQ
                                                                                                                                                                                                                                                                                                           Hanzel
                                                                                                  50 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    marrow expressed exon; gene expression analysis; probe;
cancer; leukaemia; lymphoma; myeloma.
                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
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                                                              100.0%;
                                                                         35.6%;
                                                                                                                                                                                                                                                                                                           Chen W,
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Pred. No.
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                                                  Mismatches
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                                                             4.9e-22;
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Search completed: January 21, 2004, 12:06:47 Job time: 66.4064 secs

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Result
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Maximum DB seq length: 200000000
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re greater than or equal to the score of the result being printed,
is derived by analysis of the total score distribution.
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2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*

3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*

4: /cgm2_6/ptodata/1/iaa/6B_COMB.pep:*

5: /cgm2_6/ptodata/1/iaa/PCTUS_COMB.pep:*

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US-09-617-302-4
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US-09-886-319A-48
US-09-886-319A-6
US-09-886-319A-6
US-09-617-302-5
S432264-6
US-08-744-138-6
US-09-241-376-6
US-09-314-777-4
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US-09-241-376-3
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RESULT 2 US-09-617-302-3

Sequence 3, Application US/09617302
Patent No. 6245529
GENERAL INFORMATION:
APPLICANT: Holloway, James L.
APPLICANT: Feldhaus, Andrew
TITLE OF INVENTION: TESTIS SPECIFIC CYSTATIN-LIKE PROTEIN CYSTATIN T
FILE REFERENCE: 98-72 C1

CURRENT APPLICATION NUMBER: US/09/617,302

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BLHKQVNCEFSVFAVPWFEQYKILNKSC 134

BLEKKMSCSFLVGALPWNGEFNLLSKEC 139

52 AMKEYNKESEDKYVFLVDKILHAKLÓITDRMEYQIDVQISRSNCKKPLNNTENCIPQKKP 111

1 MAEP-WQALQLLLAILLTLMALPYQARKKTFLSVHBVMAVENY------AKDSLQW 49

MAKPLW--LSLILFIIPVALAVGVDQSK-----NEVKA-QNYFGSINISNANVKQCVWF 51

112 107 Query Match
Best Local Similarity
Matches 52; Conserv

Conservative

30.8%; Score 226.5; DB 3 35.1%; Pred. No. 1.6e-19; tive 34; Mismatches 39

39; ω --

Indels Length 142;

23;

Gaps

RESULT 1 US-09-431-480- Sequence 3, Patent No. 6 GENERAL INFO APPLICANT: APPL	44444000000000000000000000000000000000	
SULT 1 -09-431-480-3 -09-431-480-3 Sequence 3, Applicati Patent No. 6235708 GENERAL INFORMATION: APPLICANT: Feldhaus, ITILE OF INVENTION: FILE REFERENCE: 98-7 CURRENT FILING DATE: EARLIER APPLICATION EARLIER FILING DATE: EARLIER FILING	161 161 161 160 155 155 153.5 153.5 153.5 147.5 147.5 147.5 147.5 147.5	
ULT 1 09-431-480-3 09-431-480-3 09-431-480-3 atent No. 6235708 ENERAL INFORMATION: APPLICANT: Holloway, James APPLICANT: Feldhaus, Andrew TITLE OF INVENTION: TESTIS: FILE REFERENCE: 98-72 CURRENT FILING DATE: 1999-1 EARLIER APPLICATION NUMBER: EARLIER APPLICATION NUMBER: EARLIER APPLICATION NUMBER: EARLIER PILING DATE: 1999-1 EARLIER PILING DATE: 1999-0 MUMBER OF SEQ ID NOS: 22 SOFTWARE: FASTSEQ for Windo EQ ID NO 3 LENGTH: 142 TYPE: PRT ORGANISM: Mus musculus 09-431-480-3	00000000000000000000000000000000000000	
n US/05 James 1 James 1 Andrew ESTIS (EMBER: 11999-11 11999-01 11999-02 Windov	1141 1211 1211 1211 1201 1201 1411 1411	
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PROTEIN CYSTATIN T	Sequence 5, Appli Sequence 11, Appl Sequence 11, Appl Sequence 5, Appli Sequence 8, Appli Sequence 2, Appli Sequence 24, Appli Sequence 12, Appli Sequence 12, Appli Sequence 12, Appli Sequence 7, Appli Sequence 7, Appli Sequence 7, Appli Sequence 7, Appli Sequence 7, Appli Sequence 7, Appli Sequence 187, Appli	

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Best Local S
Matches 52
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                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ ID NO 4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/09/431,480
CURRENT FILING DATE: 1999-11-01
EARLIER APPLICATION NUMBER: 60/109,217
EARLIER FILING DATE: 1998-11-20
EARLIER FILING DATE: 1998-11-20
EARLIER FILING DATE: 1999-09-28
EARLIER FILING DATE: 1999-09-28
NUMBER OF SEQ ID NOS: 22
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APPLICANT: Feldhaus, Andrew
TITLE OF INVENTION: TESTIS SPECIFIC CYSTATIN-LIKE PROTEIN CYSTATIN T
FILE REFERENCE: 98-72
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PRIOR APPLICATION NUMBER: 09/431,480
PRIOR FILING DATE: 1999-11-01
PRIOR APPLICATION NUMBER: 60/109,217
PRIOR FILING DATE: 1998-11-20
PRIOR APPLICATION NUMBER: 60/156,382
PRIOR FILING DATE: 1999-09-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: FastSEQ for Windows Version 3.0
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SOFTWARE: FastSEQ for
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TYPE: PRT
ORGANISM: Homo sapiens
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TYPE: PRT
ORGANISM: Mus musculus
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                                       120 AVPWFEQYKILNKSC 134
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                                                                                  65 VFLVVKTLQAQLQVTNLLEYLIDVEIARSDCRKPLSTNEICAIQENSKLKRKLSCSFLVG 124
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 MASP-WQALQLLLAILLTLMALPYQARKKTFLSVHEVMAVENY-----AKDSLQW 49
                                                                                                                                                                                                                                                             h 27.4%; Score 202; DB 3; Length 142; Similarity 36.3%; Pred. No. 1.4e-16; 49; Conservative 29; Mismatches 51; Indels
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ALPWNGEFTVMEKKC 139
                                                                                                                            HFRIFRVLKVQRQVTDHLEYHLNVEMQWTTCQKPETTN - - CVPQER - ELHKQVNCFFSVF 119
                                                                                                                                                                          WLSL-ILLTIPLALVARKDPKKNETGVLRKLKPVNASNANVKQCLWFAMQEYNKESEDKY
                                                                                                                                                                                                                   WQALQLLLAILLTLMALPYQARKKT--FLSVHEVMAVENYAKDSLQWITDQYNKESDDKY 62
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RESULT 4

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CURRENT APPLICATION NUMBER: US/09/431,480
CURRENT FILING DATE: 1999-11-01
EARLIER APPLICATION NUMBER: 60/109,217
EARLIER FILING DATE: 1998-11-20
EARLIER APPLICATION NUMBER: 60/156,382
EARLIER FILING DATE: 1999-09-28
UNMBER OF SEQ ID NOS: 22
SOPTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 2
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; TYPE: PRT
; ORGANISM: Homo s
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CURRENT APPLICATION NUMBER: US/09/617,302
CURRENT FILING DATE: 2000-07-17
PRIOR APPLICATION NUMBER: 09/431,480
PRIOR FILING DATE: 1999-11-01
PRIOR PILING DATE: 1999-11-01
PRIOR APPLICATION NUMBER: 60/109,217
PRIOR PILING DATE: 1998-11-20
PRIOR APPLICATION NUMBER: 60/156,382
PRIOR PILING DATE: 1999-09-28
PRIOR FILING DATE: 1999-09-28
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE:
SEQ ID NO 4
                                                                                                     Query Match
Best Local Similarity
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Patent No. 6245529
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Best Local Similarity
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APPLICANT: Feldhaus, Andrew
TITLE OF INVENTION: TESTIS SPECIFIC CYSTATIN-LIKE PROTEIN CYSTATIN
FILE REFERENCE: 98-72 C1
                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Holloway, James L.
APPLICANT: Feldhaus, Andrew
TITLE OF INVENTION: TESTIS SPECIFIC CYSTATIN-LIKE PROTEIN CYSTATIN
FILE REFERENCE: 98-72
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                                                                                                                                                                                     LENGTH: 141
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120 AVPWFEQYKILNKSC 134
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125 ALPWNGEFTVMEKKC 139
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LQTLLFLVITVEFVSRRVEAWGSPQIVRPFEDIPKSYV------YVQHALWYAMKE 54
                                                                                 Conservative
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                                                                                 Score 195.5; DB 3;
Pred. No. 8.2e-16;
0; Mismatches 42;
                                     -MALPYQARKKTFLSVHEVMAVENYAKDSLQWITDQ
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FILE REFERENCE: 98-72 C1
CURRENT APPLICATION NUMBER: US/09/617,302
CURRENT FILING DATE: 2000-07-17
PRIOR APPLICATION NUMBER: 09/431,480
PRIOR FILING DATE: 1999-11-01
PRIOR APPLICATION NUMBER: 60/109,217
PRIOR FILING DATE: 1998-11-20
PRIOR FILING DATE: 1998-11-20
PRIOR APPLICATION NUMBER: 60/156,382
PRIOR APPLICATION NUMBER: 60/156,382
PRIOR FILING DATE: 1999-09-28
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APPLICANT: Holloway, James L.
APPLICANT: Feldhaus, Andrew
APPLICANT: Feldhaus, ESTIS SPECIFIC CYSTATIN-LIKE PROTEIN CYSTATIN T
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION
                      CURRENT APPLICATION NUMBER: US/09/886,319A
CURRENT FILING DATE: 2001-06-20
PRIOR APPLICATION NUMBER: US 60/222,081
PRIOR FILING DATE: 2000-08-01
PRIOR PILING DATE: 2000-08-01
PRIOR APPLICATION NUMBER: DE 10030149.5
PRIOR FILING DATE: 2000-06-20
NUMBER OF SEQ ID NOS: 84
                                                                                                                                                                                                                                  APPLICANT: Regenbogen, Johannes
APPLICANT: Goppelt, Andreas
TITLE OF INVENTION: Use of Polypeptides or Nucleic Acids for
TITLE OF INVENTION: the Diagnosis or Treatment of Skin Disorders and Wound
TITLE OF INVENTION: Healing and for the Identification of Pharmacologically
TITLE OF INVENTION: Active Substances
                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Wolf, Eckard
APPLICANT: Werner, Sab
APPLICANT: Halle, Jorn
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SOFTWARE: FastSEQ fo
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                               FILE REFERENCE: 50125/014002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ENGTH: 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    115 MVFCIFIVSSKPWKFBLKMLKKQC 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   111 QVNCFFSVFAVPWFEQYKILNKSC 134
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         54 YNKESDDKYHFRIFRVLKVQRQVTDHLEYHLNVEMQWTTCQK--PETTNCV-PQERELHK 110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            45;
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Halle, Jorn-Peter
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26.6%; Score 195.5; DB 3; 31.2%; Pred. No. 8.2e-16; tive 30; Mismatches 42;
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APPLICANT: Wolf, Eckard
APPLICANT: Werner, Sabine
APPLICANT: Halle, Jorn-Peter
APPLICANT: Halle, Jorn-Peter
APPLICANT: Regenbogen, Johannes
APPLICANT: Goppelt, Andreas
ITILE OF INVENTION: Use of Polypeptides or Nucleic Acids for
ITILE OF INVENTION: the Diagnosis or Treatment of Skin Disorders and Wound
ITILE OF INVENTION: Healing and for the Identification of Pharmacologically
ITILE OF INVENTION: Active Substances
FILE REFERENCE: 50125/014002
CURRENT APPLICATION NUMBER: US/09/886,319A
CURRENT APPLICATION NUMBER: US 60/222,081
PRIOR APPLICATION NUMBER: DE 1030149.5
PRIOR FILING DATE: 2000-08-01
PRIOR FILING DATE: 2000-08-01
PRIOR FILING DATE: DE 1030149.5
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US-09-886-319A-48
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Best Local Similarity 30.2
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NUMBER OF SEQ ID NOS: 84
SOFTWARE: PastSEQ for Windows Version 4.0
SEQ ID NO 48
LENGTH: 140
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TYPE: PRT
ORGANISM: Mus musculus
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121 IYSVPWKGTHSLTKPSCKN 139
                                  118 VFAVPWFEQYKILNKSCSS 136
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                                                                                                                                                               1 MASPLRSLLFLLAVLAVAWAATPKQGPRMLGAPEEADANKEGVRRALDFAVSEYNKGSND
                                                                             AYHSRAIQVVRARKQLVAGVNYFLDVEMGRTTCTKSQTNLTDCPFHDQPHLMRKALCSFQ
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                                                                                                                                                                                                                                               24.8%; Score 182.5; DB 4; 30.2%; Pred. No. 2.9e-14; rative 31; Mismatches 63;
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; Sequence 5, Application US/09431480 ; Patent No. 6235708

US-09-431-480-5

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US-09-431-480-5
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                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/109,217
PRIOR TILING DATE: 1998-11-20
PRIOR APPLICATION NUMBER: 60/156,382
PRIOR FILING DATE: 1999-09-28
NUMBER OF SEQ ID NOS: 22
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CURRENT FILING DATE: 2000-07-17
PRIOR APPLICATION NUMBER: 09/431,480
PRIOR FILING DATE: 1999-11-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Holloway, James L.
APPLICANT: Feldhaus, Andrew
TITLE OF INVENTION: TESTIS SPECIFIC CYSTATIN-LIKE PROTEIN CYSTATIN T
FILE REFERENCE: 98-72 C1
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EARLIER FILING DATE: 1998-11-20
EARLIER FILING DATE: 1998-1156,382
EARLIER FILING DATE: 1999-09-28
NUMBER OF SEQ ID NOS: 22
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APPLICANT: Feldhaus, Andrew
TITLE OF TITLE OF THE TESTIS SPECIFIC CYSTATIN-LIKE PROTEIN CYSTATIN T
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TYPE: PRT
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Local Similarity 30.2%;
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Local Similarity 30.2%;
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13
                                                                                                                                                                     42; Conservative
                                    61 KYHFRIFRVLKVQRQVTDHLEYHLNVEMQWTTCQKPET--TNC-VPQERELHKQVNCFFS 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61 AYHSKAIQVVRARKOLVAGVNYFFDVEMGRTTCTKSQTNLTDCPFHDQPHLMRKALCSFQ 120
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                                                                                                                          1 MAEPWQALQLLLAILLTLMALPYQARKKTFLSVHEVMAVENYAKDSLQWITDQYNKESDD 60
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AYHSRAIQVVRARKOLVAGVNYFFDVEMGRTTCTKSQTNLTDCPFHDQPHLMRKALCSFQ 120
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                                                                                   MASPLRSLLFILAVLGVAWAATPKOGPRMLGAPEEADANEEGVRRALDFAVSEYNKGSND
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Pred. No. 6.7e-14;
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Pred. No. 6.7e-14;
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; PATENT NO. 5432264
; PATENT NO. 5432264
; PATENT RUBB, ANDERS; LUNDWALL, AKE; ABRAHAMSON, MAGNUS;
; DALBOGE, HENRIK
; TITLE OF INVENTION: RECOMBINANT 3-DES-OH-CYSTATIN C PRODUCED
; BY EXPRESSION IN A PROCARYOTIC HOST CELL
; NUMBER OF SEQUENCES: 8
; CURRENT APPLICATION NUMBER: US/07/929,290
; PILING DATE: 13-AUG-1992
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Patent No. 6011012
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                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
                                                    ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Yu, Guo-Liang
TITLE OF INVENTION: Human Cystatin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    y Match 24.2%; Score 178; DB 6; Local Similarity 32.2%; Pred. No. 1.1e-13; res 47; Conservative 26; Mismatches 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 440,221 FILING DATE: 21-NOV-1989 APPLICATION NUMBER: 297,198
                                                                             APPLICATION NUMBER: FILING DATE: CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                             CITY: Rockville
STATE: Maryland
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 20-MAY-1988
                                                                                                                                                                                                                                                                                                                                                       STREET:
               NAME: Brookes, A. Anders
REGISTRATION NUMBER: 36,
                                                                                                                                                                                                                                                                                            COUNTRY:
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE: Human Genome Sciences,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AFCSFQIYAVPW-QQTMTLSKSTCQD 145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MAGPLRAPLLILIAI LAVALAVSPAAGSSPGKPPRLVGGPMDASVEEEGVRRALDFAVGEY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Application US/08744138
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                                                                                                                                                                                                                                                                                                                                                         9410 Key West Avenue
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                                                                                                                         US/08/744,138
PF202P1
                                                                                                                                                                  Version
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Patent No. 6300477
GENERAL INFORMATION:
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TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: NO
ORIGINAL SOURCE:
INDIVIDUAL ISOLATE: Cystatin SN
                                                                                                      CLASSIFICATION:
PRIOR APPLICATION NUMBER: 08/744,138
APPLICATION NUMBER: 08/744,138
FILING DATE: 05-NOV-1996
CLASSIFICATION:
PRIOR APPLICATION NUMBER: 08/461,030
APPLICATION NUMBER: 08/461,030
FILING DATE: 05-JUN-1995
CLASSIFICATION:
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
ATTORNEY/AGENT INFORMATION:
NAME: BROOKES, A. Anders
REGISTRATION NUMBER: 36,373
REFERENCE/DOCKET NUMBER: PF.
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/241,376
                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: Human Cystatin NUMBER OF SEQUENCES: 13
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                                                                                                                                                                                                                                                                                                FILING DATE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE: Human Genome Sciences, Inc.
STREET: 9410 Key West Avenue
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Ni, Jian
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Yu, Guo-Liang
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RESULT 14
US-08-791-522-4
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                                                                                                             TELEFAX: 415-845-4166
INFORMATION FOR SEQ ID NO:
                                                                                                                                                          ATTORNEY/AGENT INFORMATION:
NAME: Billings, Lucy J.
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKST NUMBER: PF-0
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Bandma APPLICANT: Goli,
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ORIGINAL SOURCE:
INDIVIDUAL ISOLATE: Cystatin SN
                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/08/791,522
FILING DATE: Filed Herewith
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
                                                                         SEQUENCE CHARACTERISTICS LENGTH: 139 amino acid
                                                                                                                                                                                                                                                                                                                                                                              OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ for Windows Version
CURRENT APPLICATION DATA:
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MEDIUM TYPE: Diskett
COMPUTER: IBM Compat
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TITLE OF INVENTION: NOVEL HUMAN CYSTATIN-LIKE
TITLE OF INVENTION: PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: protein HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES:
MMEDIATE SOURCE:
                                   STRANDEDNESS:
                                                     TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: Palo Alto
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                                                                                                                                                    TELEPHONE: 415-855-0555
                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 62 YHFRIFRYLKYQRQYTDHLEYHLNYEMQWTTCQK--PETTNCVPQER-ELHKQVNCFFSV 118
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3174 Porter Drive
                                                                       139 amino acids
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                                                                            IMMEDIATE SOURCE:
LIBRARY: GenBar
CLONE: 118195
US-09-314-777-4
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US-09-314-777-4
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  Best Local Similarity 33.1 Matches 43; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 4, Application US/09314777 Patent No. 6110686
                                        Query Match
                                                                                                                                                                                                                                TELEFAX: 415-845-4166
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
NAME: Billings, Lucy J.
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF-0
TELECOMMUNICATION INFORMATION:
TELECHHONE: 415-855-0555
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/314,777
FILING DATB:
                                                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
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MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: Incyte Pharmaceuticals, Inc.
STREET: 3174 Porter Drive
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APPLICANT: Goli, Surya K.
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CLONE: 118195
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                                                                                                                                                                    STRANDEDNESS:
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STATE: CA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              68 RVLKVQRQVTDHLEYHLNVEMQWTTCQKP--ETTNC-VPQERELHKQVNCFFSVFAVPWF 124
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                                                                                                                                                                                            amino acid
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                                                                                                                                                          linear
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23.6%; Score 173.5; DB 3; 33.1%; Pred. No. 3.5e-13; tive 25; Mismatches 57;
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  Indels
                                    Length 139;
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10 LLLAILLTLMALPYQARKKTFLSVHEVMAVEN--YAKDSLQWITDQYNKESDDKYHFRIF 67

Search completed: January 21, 2004, 12:09:57 Job time: 25.6323 secs

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Result
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332.468 Million cell updates/sec
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Human cystatin-8 (
Human cystatin-8 (
Human liver peptid
Peptide #1564 enco
Peptide #590 enco
Peptide #1592 enco
Protein #1523 enco
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Arabidopsis thalia	AAG39284	21	658	45.5	45	4
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Pathogen specific	ABJ18929	24	809	46.0	45.5	æ
Arabidopsis thalia	AAG51259	21	754		46	7
Arabidopsis thalia	AAG51260	21	638	46.5	46	9
Arabidopsis thalia	AAG51261	21	620	46.5	46	5
	AAG51289	21	525	46.5	46	4.
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Glutamyl-tRNA synt	AAW21897	18	484	•	46	Ξ
Staphylococcus aur	AAU34088	22	481		46	õ
Arabidopsis thalia	AAG51290	21	409	•	46	9
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Arabidopsis thalia	AAG51291	21	391	•	46	7
Arabidopsis thalia	AAG22389	21	391	46.5	46	9
	AAE02405	22	142	•	47	ິທ
Human cystatin-rel	AAE04434	22	142		47	4.
Fragment of human	AAW78258	20	142	47.5	47	ິພ
Staphylococcus aur	AAW27996	18	142	7	47	ວ
Fragment of human	AAW78260	20	123	7.	47	12
Human cystatin-8 (AAU79865	23	80	9	49	õ
Human cystatin-8 (AAU79863	23	49	55.6	5	6
Human cystatin-8 (AAU79859	23	27	55.6	55	8
Human cystatin-8 (AAU79852	23	137		99	7
Human cystatin-8 (AAU79854	23	117	•	99	9
Human cystatin-8 (AAU79853	23	115		99	5
Human peptide enco	ABG36903	23	50	•	99	4
Peptide #1515 enco	AAM02833	22	50	•	99	ω
	AAM27545	22	50	8	99	ผ
de #15	AAM15096	22	50		99	F :
Human bone marrow	AAM67252	22	50	100.0	99	6

ALIGNMENTS

15-JUL-2002 (first entry)

AAU79857;

AAU79857 standard; Peptide; 18

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RESULT 1
AAU79827
ID 9AU7
XX AAU807
XX AAU707
XX AAU707
XX XX IS-1
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XX Cyst
KW Speat
XX Speat
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Novel isolated mammalian cystatin-8 polypeptide useful for promoting spermatogenesis, and inhibiting cancer procoagulant protein which leads
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human cystatin-8 (Zcys8) antigenic fragment #5.
                                                                                                                                                           WPI; 2002-383044/41.
                                                                                                                                                                                                                                                            Holloway JL, Gao Z,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-SEP-2000; 2000US-230230P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; seminal riuld viscosity; cryopreserved sperm; fertilisation; antigenic peptide.
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Human brain expres

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RESULT 2
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ID AAU79858
ID AAU79858
AC AAU79858
AC AAU7
XX AAU7
XX Cyst
KW Spei
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                                                                                 Novel isolated mammalian cystatin-8 polypeptide useful for promoting spermatogenesis, and inhibiting cancer procoagulant protein which leads to inhibition of thrombotic events associated with cancer -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         quantities of Zcys8 protein and DNA sequences that encode Zcys8 genes. The polynucleotide encoding (I) is useful to detect and to localise the expression of a Zcys8 gene in a biological sample and Zcys8 oligonucleotide probes are useful for in vivo diagnosis. The polynucleotide encoding (I) is useful in determining whether a subject's polynucleotide encoding (I) is useful in determining whether a subject's chromosomes contain a mutation in the Zcys8 gene like aneuploidy, gene copy number changes, insertions, deletions, restriction site changes and rearrangements and genetic alterations that inactivate the Zcys8 gene. This sequence represents an antigenic peptide of human cystatin-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cystatin-8; Zcys8; cancer; procoagulant protein; thrombosis; spermatogenesis; seminal fluid viscosity; cryopreserved sperm;
                                                                                                                                                                                                                                                                  WPI; 2002-383044/41.
                                                                                                                                                                                                                                                                                                                                                    Holloway JL,
                                                                                                                                                                                                                                                                                                                                                                                                                                               (ZYMO ) ZYMOGENETICS INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       motility; fertilisation; antigenic peptide
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Pred. No. 1.9e-08;
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Claim 2; Page 96; 100pp; English

The invention describes an isolated polypeptide (I). (I) is useful for:

mammalian cystatin-8 (Zcys8) inhibiting cancer procoagula

cancer procoagulant

leads

Page

95;

100pp;

English

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 polypeptide (I). (I) is useful for: inhibiting cancer procoagulant protein in an individual and thus inhibiting the thrombotic event associated with cancer; promoting spermatogenesis, modulating sent fluid viscosity, enhancing viability of cryopreserved sperm, sperm motility and fertilisation; and as antigenic peptides to generate
                                                                                   Novel isolated mammalian cystatin-8 polypeptide useful for promoting spermatogenesis, and inhibiting cancer procoagulant protein which leated inhibition of thrombotic events associated with cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                             Cystatin-8; Zcys8; cancer; procoagulant protein; thrombosis; spermatogenesis; seminal fluid viscosity; cryopreserved sperm; sperm motility; fertilisation; antigenic fragment.
                                                                                                                                                           WPI; 2002-383044/41.
                                                                                                                                                                                            Holloway JL,
                                                                                                                                                                                                                                                                   01-SEP-2000; 2000US-230230P
                                                                                                                                                                                                                                                                                                      29-AUG-2001; 2001WO-US26868
                                                                                                                                                                                                                                                                                                                                         14-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                            WO200220567-A2
                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human cystatin-8 (Zcys8) antigenic fragment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15-JUL-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAU79856 standard; Peptide; 36 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention describes an isolated mammalian cystatin-8 (Zcys8)
                                                                                                                                                                                                                               (ZYMO ) ZYMOGENETICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This sequence represents an antigenic peptide of human cystatin-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              35 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                            Gao Z,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%;
                                                                                                                                                                                            Bishop
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Pred. No. 4e-08;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       #4.
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ARESULT 4
ABG48915
ID 48614
XX ABG4
XX ABG4
XX Huma
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XX Huma
XX Homo
OS Homo
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XX HOmo
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AX 30-J
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CC associated with cancer; promoting spermatogenesis, modulating seminal
CC fluid viscosity, enhancing viability of cryoppreserved sperm, sperm
CC motility and fertilisation; and as antigenic peptides to generate
CC entility and fertilisation in an antigenic peptides to generate
CC of interaction between Zcys8 and its receptor. Zcys8 is useful in
CC enhancing fertilisation during assisted reproduction in humans and in
CC animals. Anti-(I) antibodies are useful to screen biological samples like
CC presence of Zcys8. The antibodies are also useful to isolate large
CC quantities of Zcys8 protein and DNA sequences that encode Zcys8 genes.
CC The polynucleotide encoding (I) is useful to detect and to localise the
CC copynucleotide probes are useful for in vivo diagnosis. The
CC coligonucleotide probes are useful in determining whether a subject's
CC copynucleotide encoding (I) is useful in determining whether a subject's
CC copynucleotide probes are useful for in vivo diagnosis. The
CC copynucleotide probes are useful for in several time and place and
CC copynucleotide probes are useful for in vivo diagnosis. The
CC copynucleotide probes are useful for in several time and several subject's
CC copynucleotide probes are useful for in the Zcys8 gene.
CC copynucleotide probes are useful for in the Zcys8 gene tike aneuploidy, gene
CC copynucleotide probes and antation in the Zcys8 gene in the Zcys8 gene.
CC copynucleotide and genetic alterations that inactivate the Zcys8 gene.
CC criss sequence represents an antigenic fragment of human cystatin-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
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Best Local
                                                                                                                                        Human genome-derived single exon nucleic acid probes useful analysing gene expression in human adult liver -
                                                                                                                                                                                                                                                                                                                              Penn
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03-AUG-2000;
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26-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; liver; cirrhosis; hyperlipoproteinaemia; hyperlipidaemia;
hypercholesterolaemia; coronary heart disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09-AUG-2001.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human liver peptide,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABG48915 standard; Peptide;
                                                                                                                                                                                                                                                      WPI; 2001-488898/53
                                                                                                                                                                                                                                                                                                                                                                                                      (MOLE-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27-SEP-2000;
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                                                                                                                                                                                                                                                                                                                              SG,
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                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULAR DYNAMICS INC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KDSLQWITDQYNKESDDK 36
                                                                                                                                                                                                                                                                                                                              Hanzel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                36 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; 2000US-0180312.
; 2000US-0207456.
; 2000US-0608408.
; 2000US-0632366.
; 2000US-0632366.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2000GB-0024263.
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                                                                    ID No
                                                                                                                                                                                                                                                                                                                              DK,
                                                                        27563;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ ID No 27563.
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                                                                                                                                                                                                                                                                                                                              Chen
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                                                                                                                                                                                                                                                                                                                              E
                                                                    658pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  50
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Pred. No. 4.1e-08;
                                                                                                                                                                                                                                                                                                                              Rank DR
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The invention relates to a single exon nucleic acid probe (SENP)

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RESULT 5
ABB28913
ABB28913
AC ABB2
XX ABB2
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Best Local
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Note: The sequence information for this patent does not appear in the printed specification but was obtained in electronic format directly from wife.
                                                                                     The invention relates to a spatially-addressable set of single exon nucleic acid probes for measuring gene expression in a sample derived from human breast and BT 474 cells. The method involves contacting the probes with a collection of detectably labelled nucleic acids
                                                                                                                                                                                                                                                                                        New spatially-addressable set of single exon nucleic acid probes, useful for measuring gene expression in sample derived from human breast, comprises number of single exon nucleic acid probes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         04-FEB-2000;
26-MAY-2000;
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                                                                                                                                                                                                                                    Claim 27; SEQ ID NO 11881; 327pp + sequence listing; English
                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-496933/54.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30-JUN-2000;
03-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           09-AUG-2001.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      disease; cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; microarray; single exon probe; gene expression; breast;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Peptide #1564 encoded by breast cell single exon nucleic acid probe.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (MOLE-)
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                           ed from mRNA of human breast, and then measuring the label to each probe of the microarray. The probes are useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      l Similarity
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2000US-0236359
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Chen W,
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Pred. No. !
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rank DR;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         <u>,</u>
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RESULT 6
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Best Local
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Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.
bound to each probe of the microarray. The probes are userum bound to each probe of the microarray. The probes are userum bound to genomic DNA predicted verifying the expression of regions of genomic DNA predicted verifying the expression of regions of genomic DNA predicted verifying the expression of regions of genomic DNA predicted verifying the expression of regions of the microarray.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Penn
                                                                                         nucleic acid probes for measuring gene expression in a sample derived from human breast and BT 474 cells. The method involves contacting the probes with a collection of detectably labelled nucleic acids derived from mRNA of human breast, and then measuring the label
                                                                                                                                                                                                                                                                                              Claim 27;
                                                                                                                                                                                                                                                                                                                                                      New spatially-addressable set of single exon nucleic acid pruseful for measuring gene expression in sample derived from breast; comprises number of single exon nucleic acid probes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              03-AUG-2000;
21-SEP-2000;
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26-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30-JAN-2001; 2001WO-US00662
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; microarray; single
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                                                                                                                                                                                                                           invention relates to a spatially-addressable set
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SG,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KDSLOWITDOYNKESDDK 18
                                                                                                                                                                                                                                                                                              SEQ ID NO 15357; 327pp + sequence listing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hanzel
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2000US-0207456
; 2000US-0608408
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               breast cell single exon nucleic acid probe.
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Pred. No. 5.9e-08;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Rank
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gene expression; breast;
                                                               The probes are useful for
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                                                                                                                                                                                                                                                                                              English.
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RESULT 7
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Best Local :
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21-SEP-2000;
27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           04-FEB-2000;
26-MAY-2000;
30-JUN-2000;
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Note: The sequence data for this patent did not form part of printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             agents on cells. The microarray of this invention presents a far greativersity of probes for measuring gene expression, with far less bis than expressed sequence tag microarrays. The method is suitable for rapid production of functional information from genomic sequence. The present sequence is a peptide encoded by a single exon nucleic acid probe of the invention.
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                                                                           The invention relates to a single exon nucleic acid probe for measuring human gene expression in a sample derived from human foetal liver. The single exon nucleic acid probes may be used for predicting, measuring and displaying gene expression in samples derived from human fetal liver. The present sequence is a peptide encoded by a single exon nucleic acid probe of the invention.

Note: The sequence data for this patent did not form part of the princed specification, but was obtained in electronic format directly
                                                                                                                                                                                                                                                                                                                                                                                                Human genome-derived single exon nucleic acid probes useful analyzing gene expression in human fetal liver -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2001-483447/52.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-JAN-2001; 2001WO-US00669
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Peptide #1592
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                                                         WIPO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOLECULAR DYNAMICS INC.
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                                                      at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                             gene expression
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2000US-0608408.
2000US-0632366.
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2000US-0236359
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                                                                                                                                                                                                                                                                                                                                            639pp + sequence listing; English
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Pred. No. 5.9e-08
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                                                                                                                                                                          exon
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Sequence

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ABB19524
ID ABB:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 18; Conserv
                                                             Query Match
Best Local :
                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    04-FEB-2000;
26-MAY-2000;
30-JUN-2000;
03-AUG-2000;
                                                                                                                      The present invention relates to single exon nucleic acid probes for measuring human gene expression in a sample derived from human heart (see ABA21335-ABA41305). The present sequence is a protein encoded by one such probe. The probes may be used for predicting, measuring and displaying gene expression in samples derived from the human heart via microarrays. By measuring gene expression, the probes are useful for predicting, diagnosing, grading, staging, monitoring and prognosing diseases of the human heart and vascular system e.g. cardiovascular disease, hypertension, cardiac arrhythmias and congenital heart disease. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp. wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                    Single exon nucleic acid probes for analyzing gene expression in human
                                                                                                                                                                                                                                                                                                                                                                    WPI; 2001-488899/53.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 09-AUG-2001.
                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                  Claim 15;
                                                                                                                                                                                                                                                                                                                                                                                              Penn
                                                                                                                                                                                                                                                                                                                                                                                                                      (MOLE-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                              21-SEP-2000;
27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-JAN-2001; 2001WO-US00666.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200157274-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            congenital heart disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; gene expression; heart; microarray; vascular system; cardiovascular disease; hypertension; cardiac arrhythmia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Protein #1523 encoded by probe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         23-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABB19524;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABB19524 standard; Protein;
19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19 KDSLQWITDQYNKESDDK 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      μ
                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULAR DYNAMICS INC
               KDSLQWITDQYNKESDDK 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KDSLQWITDQYNKESDDK 18
KDSLQWITDQYNKESDDK 36
                                                                                                                                                                                                                                                                                                 SEQ ID No 21294; 530pp; English.
                                                                                                                                                                                                                                                                                                                                                                                              Hanzel
                                                                                                   50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; Score 99; DB 22; ilarity 100.0%; Pred. No. 5.9e-08; Conservative 0; Mismatchae
                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000US-0608408.
2000US-0632366.
2000US-0234687.
2000US-0236359.
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2000US-0207456.
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                                                             100.0%;
                                                                                                                                                                                                                                                                                                                                                                                              Chen W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             50
                                               0
                                               Score 99; DB 22;
Pred. No. 5.9e-08;
                                                                                                                                                                                                                                                                                                                                                                                              Rank DR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             for measuring heart cell gene expression.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ₿
                                                                         Length 50;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 50;
                                                  Indels
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RESULT 10
AAM67252
 3XBXBXBXB
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                                                                                                                                                                                            Matches
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Best Local
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30-JUN-2000;
03-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; brain expressed exon; microarray; Alzheimer's disea epilepsy; cancer.
                                                                                                                                                                                                                                                           diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia, epilepsy and cancers. The present sequence is a protein encoded by one of the probes of the invention.
                                             06-NOV-2001
                                                                                                                                                                                                                                                                                              The present invention provides a number of single exon nucleic acid probes which are derived from genomic sequences expressed in the human brain. They can be used to measure gene expression in brain cell samples, which may enable the diagnosis and improved treatment of nervous system.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human brain expressed single exon probe encoded protein SEQ ID NO: 26976.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAM54871 standard; Protein; 50
                     Human bone
                                                                   AAM67252;
                                                                                       AAM67252 standard; Protein; 50
                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                        Example 4; SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                          Single exon nucleic acid probes for analyzing gene expression in human
                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2001-483446/52.
                                                                                                                                                                                                                                                                                                                                                                                                                                       Penn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21-SEP-2000;
27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     04-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            30-JAN-2001; 2001WO-US00667.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200157275-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             (MOLE-) MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                       SG
                                                                                                                                                19
                                                                                                                                                                                            18;
                                                                                                                                                             1 KDSLQWITDQYNKESDDK 18
                                                                                                                                                                                                        Similarity
                                                                                                                                                KDSLQWITDQYNKESDDK 36
                                                                                                                                                                                                                                                                                                                                                                                                                                       Hanzel
                                                                                                                                                                                                                                         50 AA;
                       marrow
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2000US-0180312.
2000US-0207456.
2000US-0608408.
2000US-0632366.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2000US-0234687.
2000US-0236359.
                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2000GB-0024263
                                                                                                                                                                                                                                                                                                                                                                                                                                      DK,
                       expressed
                                                                                                                                                                                                       100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                       Chen
                                                                                                                                                                                                                                                                                                                                                        26976; 650pp + Sequence Listing; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              exon; gene expression analysis; disease; multiple sclerosis; so
                                                                                                                                                                                                                                                                                                                                                                                                                                       W, Rank DR
                                                                                                                                                                                           0;
                      probe encoded protein SEQ ID
exon; gene expression analysis; probe;
                                                                                                                                                                                                       Score 99; DB 22;
Pred. No. 5.9e-08;
                                                                                         B
                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ion analysis; probe;
sclerosis; schizophrenia;
                                                                                                                                                                                             0
                                                                                                                                                                                                                  Length 50;
                       NO:
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Human; bone marrow expressed

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Best Local
04-FEB-2000;
26-MAY-2000;
30-JUN-2000;
03-AUG-2000;
21-SEP-2000;
                                                                                                                                                                                                                                                                                                                                 The present invention provides a number of single exon nucleic acid probes which are derived from genomic sequences expressed in the human bone marrow. They can be used the supersession in bone marrow samples, which may enable the improved diagnosis and treatment of cancers such as lymphoma, leukaemia and myeloma. The present sequence is a protein encoded by one of the probes of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Penn
                                                    30-JAN-2001; 2001WO-US00670
                                                                     09-AUG-2001.
                                                                                       WO200157278-A2
                                                                                                      Homo sapiens.
                                                                                                                        cervical cancer
                                                                                                                                Probe; human;
                                                                                                                                               Peptide #1530 encoded by probe for measuring cervical gene expression
                                                                                                                                                                                   AAM15096;
                                                                                                                                                                                                    AAM15096 standard; Protein;
                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                Example 4; SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                               analyzing
                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2001-488900/53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26-MAY-2000;
30-JUN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                04-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-JAN-2001; 2001WO-US00668.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09-AUG-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200157276-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    microarray; cancer; leukaemia; lymphoma; myeloma
                                                                                                                                                                   12-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (MOLE-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21-SEP-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                               genome-derived single exon nucleic zing gene expression in human bone m
                                                                                                                                                                                                                                               19
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                                                                                                                                                                                                                                                                                  18;
                                                                                                                                                                                                                                                                                         Similarity
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                                                                                                                                                                                                                                                         KDSLQWITDQYNKESDDK 18
                                                                                                                                                                                                                                               KDSLQWITDQYNKESDDK 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hanzel DK,
                                                                                                                                                                                                                                                                                                                   50 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; 2000US-0180312.
; 2000US-0207456.
; 2000US-0608408.
; 2000US-0632366.
; 2000US-0234687.
; 2000US-0236359.
2000US-0180312.
2000US-0207456.
2000US-0608408.
2000US-0632366.
2000US-0234687.
                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2000GB-0024263.
                                                                                                                                                                  (first entry)
                                                                                                                                microarray; gene expression;
                                                                                                                                                                                                                                                                                         100.0%;
                                                                                                                                                                                                                                                                                                                                                                                               27558; 658pp + Sequence Listing; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Chen W,
                                                                                                                                                                                                     50
                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                         Score 99; DB 22;
Pred. No. 5.9e-08;
                                                                                                                                                                                                     ₿
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rank
                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                           뮸
                                                                                                                                                                                                                                                                                                                                                                                                                 marrow
                                                                                                                                                                                                                                                                                                                                                                                                                       acid probes useful
                                                                                                                                cervical epithelial cell;
                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                  50;
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                                                                                                                                                                                                                                                                                Gaps
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RESULT 12
AAM27545
ID AAM27
XX
AC AAM27
XX
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Best Local S
Matches 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention relates to human single exon nucleic acid probes (SENP: see AAI10068-AAI28459). The present sequence is a peptide encoded by one such probe. The SENPs are derived from human HeLa cells. The SENPs can be used to produce a single exon microarray, which can be used for measuring human gene expression in a sample derived from human cervical epithelial cells. By measuring gene expression, the probes are therefore useful in grading and/or staging of diseases of the cervix, notably
                                                                                                                                                             30-JUN-2000;
03-AUG-2000;
                                                                                                                                                                                           04-FEB-2000;
26-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Note: The sequence data for this patent did not specification, but was obtained in electronic fo at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                     09-AUG-2001.
                                                                                                                                                                                                                                                                                                                                                             genetic disorder.
                                                                                                                                                                                                                                                                                                                                                                        Probe; microarray; human; placenta; antenatal diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                       Peptide #1582 encoded
                                                                                                                                                                                                                                                                                                                                                                                                                                     17-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAM27545 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human genome-derived single exon nucleic acid probes useful for analyzing gene expression in human cervical epithelial cells -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27-SEP-2000;
04-OCT-2000;
Human genome-derived single exon nucleic acid probes useful for
                           WPI; 2001-488897/53.
                                                                                                                                   27-SEP-2000;
                                                                                                                                                                                                                                        30-JAN-2001; 2001WO-US00663
                                                                                                                                                                                                                                                                                                   WO200157272-A2
                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAM27545;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cervical cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-488901/53.
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                                                                                        (MOLE-)
                                                                                                                                                   21-SEP-2000;
                                                          SG,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27; SEQ ID No 19922; 487pp; English.
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                                                                                      MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
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                                                          Hanzel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            50 AA;
                                                                                                                                                2000US-0207456.
2000US-0608408.
2000US-0632366.
2000US-0234687.
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2000GB-0024263.
                                                                                                                    2000US-0236359
2000GB-0024263
                                                                                                                                                                                                             2000US-0180312.
                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry
                                                         봈
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                       by probe
                                                         Chen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chen W, Rank DR;
                                                         ξ.
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Pred. No. 5.9e-08;
                                                          Rank DR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                       for measuring placental gene expression.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ormat directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 50;
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analyzing gene expression in human placenta

FXSSSSSSXX

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RESULT 13
ADMO2833
ID DAMO2833
ID DAMO2833
ID DAMO283
AC ADMO20
XX Probe KW Probe KW Infla
XX WPI;
XX Clai
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention relates to single exon nucleic acid probes (SENP: see AA131115-AA157546). The present sequence is a peptide encoded by on such probe. The probes are useful for producing a microarray for predicting, measuring and displaying gene expression in samples derived from human placenta. The probes are useful for antenatal diagnosis of
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                                         The present invention relates to novel single exon nucleic acid probes (see AAI00010-AAI10067). The present sequence is a peptide encoded by one such probe. The probes are useful for measuring human gene expression in a human breast sample, where the probe hybridises at high stringency to a nucleic acid expressed in the human breast. The probes are useful for predicting, diagnosing, grading, staging, monitoring and prognosing diseases of the human breast, particularly those diseases with polygenic actiology. The diseases include: breast cancer, disorders of development, inflammatory diseases of the breast, fibrocystic changes, proliferative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       04-FEB-2000; 2000US-0180312.
26-MAY-2000; 2000US-0207456.
30-JUN-2000; 2000US-0608408.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Probe; human; breast disease; breast cancer; development disorder;
inflammatory disease; proliferative breast disease; non-carcinoma tumour.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Peptide #1515 encoded by probe for measuring breast gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  09-OCT-2001
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                        breast
                                                                                                                                                                                                                                                                                     Claim 27;
                                                                                                                                                                                                                                                                                                                                                       Novel single exon
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     human genetic disorders.
                      inflammatory diseases of the breast, fibrocystic changes, breast disease and non-carcinoma tumours.
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                                                                                                                                                                                                                                                                                                                                   human
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                                                                                                                                                                                                                                                                                     SEQ ID No 11573;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hanzel
                                                                                                                                                                                                                                                                                                                                   breast
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2000US-0234687.
2000US-0236359.
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Pred. No. 5.9e-08;
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  patent did not form
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  of the printed
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RESULT 14
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; single exon probe; asthma; lung cancer; COPD; ILD; chronic obstructive pulmonary disease; interstitial lung disease; familial idiopathic pulmonary disease; interstitial lung disease; familial idiopathic pulmonary ibrosis; neurofibromatosis; tuberous sclerosis; Gaucher's disease; Niemann-Pick disease; Hermansky-Pudlak syndrome; sarcoidosis; pulmonary haemosiderosis; pulmonary histiocytosis; lymphangioleiomyomtosis; Karagener syndrome; pulmonary alveolar proteinosis; fibrocystic pulmonary dysplasia; pulmonary ciliary dyskinesis; pulmonary hypertension;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        specification, but was obtained in electronic at ftp.wipo.int/nuh/nuhlishad ---
The invention relates to a spatially-addressable set of single exon nucleic acid probes for measuring gene expression in a sample derived from human lung comprising single exon nucleic acid probes having one 12614 nucleic acid sequences mentioned in the specification, or their complements or the 12387 open reading frames derived from the 12614 probes; Also included are a microarray comprising the novel set of probes; the novel set of probes which hybridise at high stringency to nucleic acid expressed in the human lung; measuring gene expression in a sample derived from human lung, comprising (a) contacting the array wi a collection of detectably labeled nucleic acids derived from human lung, and (b) measuring the label detectably bound to each probe of the array; identifying exons in a eukaryotic genome, comprising
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26-MAY-2000;
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                                                                                                                                                                                                                                                                                                                                                       Claim
                                                                                                                                                                                                                                                                                                                                                                                                                               Spatially-addressable set of single exon nucleic acid probes, used to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2002-114183/15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  04-OCT-2000;
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03-AUG-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SG,
                                                                                                                                                                                                                                                                                                                                                       27; SEQ ID No 26568;
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2000US-236359P.
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2000US-0632366.
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RESULT 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local S
Matches 18
Novel isolated mammalian cystatin-8 polypeptide useful for promoting spermatogenesis, and inhibiting cancer procoagulant protein which leads to inhibition of thrombotic events associated with cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cystatin-8; Zcys8; cancer; procoagulant protein; thrombosis; spermatogenesis; seminal fluid viscosity; cryopreserved sperm; sperm motility; fertilisation; antigenic fragment.
                                                                                                                                  WPI; 2002-383044/41.
                                                                                                                                                                                                 Holloway JL,
                                                                                                                                                                                                                                                                                                                                           01-SEP-2000; 2000US-230230P
                                                                                                                                                                                                                                                                                                                                                                                                          29-AUG-2001; 2001WO-US26868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200220567-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human cystatin-8 (Zcys8) antigenic fragment #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15-JUL-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAU79853 standard; Protein; 115 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (a) algorithmically predicting at least one exon from genomic sequences of the eukaryote; and (b) detecting specific hybridisation of detectably labeled nucleic acids from eukaryote lung mNNA, to a single exon probe,
                                                                                                                                                                                                                                                                           (ZYMO ) ZYMOGENETICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ftp.wipo.int/pub/published_pct_sequences.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KDSLQWITDQYNKESDDK 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KDSLQWITDQYNKESDDK 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           50 AA;
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                                                                                                                                                                                                 Gao Z,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; Score 99; DB 23;
100.0%; Pred. No. 5.9e-08;
                                                                                                                                                                                                        Bishop PD
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                                                                                                                                                                                                                                                                                          The invention describes an isolated mammalian cystatin-8 (Zcys8)

CC polypeptide (I), (I) is useful for: inhibiting cancer procoagulant

CC protein in an individual and thus inhibiting the thrombotic events

CC associated with cancer; promoting spermatogenesis, modulating seminal

CC fluid viscosity, enhancing viability of cryopreserved sperm, sperm

CC motility and fertilisation; and as antigenic peptides to generate

CC antibodies. Zcys8 is useful as research reagent for characterising sites

CC of interaction between Zcys8 and its receptor. Zcys8 is useful in

CC enhancing fertilisation during assisted reproduction in humans and in

CC enhancing fertilisation during assisted reproduction in humans and in

CC enhancing fertilisation during assisted reproduction in humans and in

CC enhancing fertilisation during assisted reproduction in humans and in

CC quantities of Zcys8. The antibodies are useful to screen biological samples like

CC quantities of Zcys8 protein and DNA sequences that encode Zcys8 genes.

CC The polymucleotide encoding (I) is useful to detect and to localise the

CC oligonucleotide probes are useful for in vivo diagnosis. The

CC oligonucleotide encoding (I) is useful to sample and Zcys8

CC polymucleotide encoding (I) is useful to detect and to localise the

CC opy number changes, insertions, deletions, restriction site changes and

CC rearrangements and genetic alterations that inactivate the Zcys8 gene.
                                                                                                Query Match
Best Local S
Matches 18
                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 2; Page 94; 100pp; English.
                                                                                                                                                                                                                                                                          This sequence represents an antigenic fragment of human cystatin-8
22
                                       1 KDSLOWITDQYNKESDDK 18
                                                                                                   18;
                                                                                                                                Similarity
KDSLQWITDQYNKESDDK 39
                                                                                                                                                                                                    115 AA;
                                                                                                   Conservative
                                                                                                                           100.0%; Score 99; DB 23; Length 115; 100.0%; Pred. No. 1.5e-07;
                                                                                                   o,
                                                                                                      Mismatches
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Search completed: January 21, 2004, 12:06:47 Job time: 8.59355 secs

GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein protein search, using sw model

Run on: January 21, 2004, 12:00:59; ; Search time 2.32258 Seconds (without alignments) 364.457 Million cell updates/sec

US-09-941-314-7 99

Title: Perfect score: Sequence: KDSLQWITDQYNKESDDK 18

Scoring table: BLOSUM62 Gapop 10.0 , Gapext 0.5

Searched: 127863 seqs, 47026705 residues

Total number of hits satisfying chosen parameters: 127863

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

SwissProt_41:*

Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	80	7	ō	ហ	4	ω	N	1	No.	Result
42	42	42	42	42	43	43	43	43	43	43	44	44	44	44	44	44	44	44	44	44	44	44	44	44	45	45.5	46	47	47	47	63	99	Score	
42.4	42.4	42.4	42.4	42.4	43.4	43.4	43.4	43.4	43.4	43.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	•	•	46.0	٥.	•	.7	7.	63.6	100.0	Match	Query *
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TRMB_MYCGE	TYSY_XANCP	TYSY_XANAC	SODE_HUMAN	CYT_COTJA	YAYB_SCHPO	GUNW_BRWCA		APN1_YEAST	RRF_FUSNN	CST8_MOUSE	FA5_PIG	BIP_SPIOL	BIP5_TOBAC		BIP_LYCES	BIP3_MAIZE	BIP2_MAIZE	PRE1_STAAU	BIP8_TOBAC	BIP2_TOBAC		YTMK_BACSU	BIP3_TOBAC	Y02B_BPT4	SYFA_UREPA	HYSA STAAU	SYE STAAM	MESJ HAEIN	NCAP_BUNLC	CST8_HUMAN	CS11 MOUSE	CS11 HUMAN	ID	
P47254 mycoplasma	Q8pce7 xanthomonas	xanth	P08294 homo sapien	P81061 coturnix co	_						Q9glp1 sus scrofa	apin	տ	Q03684 nicotiana t	P49118 lycopersico	zea	-	P03857 staphylococ		Q03682 nicotiana t		034852 bacillus su	Q03683 nicotiana t			Q59801 staphylococ	Q99w75 staphylococ	P44689 haemophilus	P04873 bunyavirus	O60676 homo sapien .	Q9d269 mus musculu	2 ho	Description	

ALIGNMENTS

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28-FEB-2003 (Rel. 41, Last amnotation update) 28-FEB-2003 (Rel. 41, Last sequence update) 28-FEB-2003 (Rel. 41, Last sequence update) 28-FEB-2003 (Rel. 41, Last amnotation update) 29-FEB-2003 (Rel. 41, Last	1 UMAN S11_HU

(See http://www.isb-sib.ch/announce/

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RA Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,
RA Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Kuchl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
Ra Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Gustincich S., Ringwald M., Rodriguez I., Sakamoto N.,
RA Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
RA Suzuki H., Toyo-oka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,
RA Hayashiraki Y. .
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Matches 18
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entities requires a license agreement 'cor send an email to license
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EMBL;
HSSP;
                                        Nature 409:685-690(2001
                                                  Hayashizaki Y.; "Function of a full-length
                                                                                                                                                                                                                                                                                                             STRAIN=C57BL/6J; TISSUE=Epididymis; MEDLINE=21085660; PubMed=11217851;
                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                          Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                      Cystatin
                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-FEB-2003
15-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Q9D2\overline{6}9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pfam; PF00031; cystatin; 1.
SMART; SM00043; CY; 1.
                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM
                                                                                                                                                                                                                                                                                                                                                                   NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                          CST11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VARSPLIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROSITE; PS00287; CYSTATIN; FALSE_NEG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Genew; HGNC:15959;
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              SIMILARITY: BELONGS
                         SUBCELLULAR LOCATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         inhibitor;
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Rodentia;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   sequence up
annotation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
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/FTId=VSP_001260.
C585C8C39A585C3B CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             POTENTIAL.
CYSTATIN 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 99;
Pred. No.
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BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                              Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
           eted (Potential).
CYSTATIN FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alternative splicing
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.on update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          139
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                                                  collection.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (POTENTIAL)
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                                                                                    n K.-F.,
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MEDLINE 21638749; PubMed = 11780052;

AD Deloukas P., Matthews L.H., Ashurst J., Burton J., Gilbert J.G.R., And Deloukas P., Matthews L.H., Ashurst J., Babbage A.K., Bagguley C.L., And Jones M., Stavrides G., Almeida J.P., Babbage A.K., Beare D.M., And Delevan, B. Barlow K.F., Bates K.N., Beard L.M., Beare D.M., Balley J., Barlow K.F., Bates K.N., Beard L.M., Brown A.J., Balley O.P., Bird C.P., Blakey S.E., Bridgeman A.M., Brown A.J., And Beasley O.P., Bird C.P., Blakey S.E., Bridgeman A.M., Carter N.P., Bates A.P., Carder C., Carter N.P., Bates A.P., Carder C., Carter N.P., Bates A.P., Clark L.N., Clark S.Y., Clee C.M., Chapman J.C., Clamp M., Clark G., Clark L.N., Clark S.Y., Clee C.M., Clegg S., Cobley V.E., Collier R.E., Connor R.E., Corby N.R., Coulson A., Coville G.J., Deadman R., Dhami P.D., Dunn M., Ellington A.G., Frankland J.A., Fraser A., French L., Garner P., And Crafham D.V., Griffiths C., Griffiths M.N.D., Gwilliam R., Hall R.E., Hammond S., Harley J.L., Heath P.D., Ho S., Holden J.L., Howden P.J., Hammond S., Hunt A.R., Hunt S.E., Jekosch K., Johnson C.M., Johnson D., And Kay M.P., Kimberley A.M., King A., Knights A., Laird G.K., Lawlor S., Lahlor S., Lah
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Best Local S
Matches 9
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060676;
30-MAY-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE=95344753; Pt
Cornwall G.A., Hann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa;
Mammalia; Eutheria;
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HSSP; P01034; 1G96.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "Transient appearance of CRES protein caput epididymal sperm maturation."; Mol. Reprod. Dev. 41:37-46(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CST8 OR
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28-FEB-2003
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InterPro; IPR000010; Cystatin.
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    Created)
    Last sequence update)
    Last annotation update)

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CYSTATIN 11.

CYSTATIN 11.

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Pred. No.
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                                                                Lawlor S.,
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P04873;
13-AUG-1987
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phillimore B.J.C.T., Prathalingam S.R., Plumb R.W., Rameay H.,
Rice C.M., Ross M.T., Scott C.B., Sehra H.K., Shownkeen R., Sims S.,
Skuce C.D., Smith M.L., Soderlund C., Steward C.A., Sulston J.B.,
Swann R.M., Sycamore N., Taylor R., Tee L., Thomas D.W., Thorpe A.,
Tracey A., Tromans A.C., Vaudin M., Wall M., Wallis J.M.,
Whitehead S.L., Whittaker P., Willey D.L., Williams L., Williams S.A.,
Wilming L., Wray P.W., Hubbard T., Durbin R.M., Bentley D.R., Beck S.,
                                     Bunyavirus La Crosse.
Viruses; ssRNA negative-strand
NCBI_TaxID=11577;
                                                                                                                                                                                                                                                                              BUNLC
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GO; GO:0004869; F:cysteine protease
InterPro; IPR000010; Cystatin.
    SEQUENCE FROM N.A
                                                                                                                                                              13-AUG-1987
01-AUG-1990
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SMART; SM00043; CY; 1.
Thiol protease inhibitor; Signal;
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EMBL; AL109954; CAB64234.1; -.
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                                                                                                                                    Nucleocapsid
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TISSUE SPECIFICITY: PROXIMAL CAPUT REGION OF THE EPIDIDYMIS ITSUE SPECIFICITY: PROXIMAL CAPUT REGION OF THE EPIDIDYMIS EXPRESSION IN THE TESTIS. WITHIN THE TESTIS IT IS ELONGATING SPERMATIDS, WHEREAS WITHIN THE EPIDIDYMIS IT IS EXCLUSIVELY SYNTHESIZED BY THE PROXIMAL CAPUT EPITHELIUM.
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50.0%;
                                                                                                                                       (Nucleoprotein).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 47; DB
Pred. No. 2.3;
3; Mismatches
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CYSTATIN-RELATED EPIDIDYMAL SPERMATOGENIC
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                                                                    viruses; Bunyaviridae; Orthobunyavirus
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by non-profit institutions as long as its content
modified and this statement is not removed. Usage by an
entitles requires a license agreement (See http://www.isb-
or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  InterPro; ipr001784; Bunya_nucleocap.
Pfam; PF00952; Bunya_nucleocap; 1.
ProDom; PD001909; Bunya_nucleocap; 1.
Nucleocapsid; RNA-binding.
SEQUENCE 235 AA; 26530 MW; 56EBB4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Virology 128:463-468(1983).
-!- SUBCELLULAR LOCATION: INTERNAL
-!- SIMILARITY: 45% IDENTITY TO AIN
                                                                                                                                                                                                                  Bacteria; Proteobacteria; Pasteurellaceae; Haemophi NCBI_TaxID=727;
                                                                                                                                                                                                                                                                                                                         MESJ HAEIN
P44689;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Akashi H., Bishop D.H.L.; "Comparison of the sequences and hare bunyavirus S RNA species.";
                                   Science
                                                                                                                                                                                  STRAIN=Rd
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                                                       "Whole-genome random sequencing
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                       SIMILARITY: BELONGS
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                                                         and assembly of Haemophilus influenzae
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Mismatches
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RETTAIN=MU50 / ATCC 700699, and N315;

RX MEDLINE=21311952; PubMed=11418146;

RX Kuroda M., Ohta T., Uchiyama I., Baba T., Yuzawa H., Kobayashi I.,

RA Kuroda M., Ohta T., Uchiyama I., Baba T., Lian J.-Q., Ito T.,

RA Cui L., Oguchi A., Aoki K.-I., Nagai Y., Lian J.-Q., Ito T.,

RA Kanamori M., Matsumaru H., Maruyama A., Murakami H., Hosoyama A.,

RA Mizutani-Ui Y., Takahashi N.K., Sawano T., Inoue R.-I., Kaito C.,

RA Mizutani-Ui Y., Takahashi N.K., Sawano T., Inoue R.-I., Kaito C.,

RA Sekimizu K., Hirakawa H., Kuhara S., Goto S., Yabuzaki J.,

Sekimizu K., Yamashita A., Oshima K., Furuya K., Yoshino C., Shiba T.,

RA Kanehisa M., Ogasawara N., Hayashi H., Hiramatsu K.;

RA Kanehisa M., Ogasawara N., Hayashi H., Hiramatsu K.;
      SYE_STAAM
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Q99W75;
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GLTX OR SAV0528 OR SA0486 OR MW0483. Staphylococcus aureus (strain Mu50 / ATCC 700699) Staphylococcus aureus (strain M315), and Staphylococcus aureus (strain MW2). Bacteria; Firmicutes; Bacillales; Staphylococcus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              InterPro; IPR000541; UPF00
Pfam; PF01171; ATP_bind3;
Complete proteome.
SEQUENCE 430 AA; 50052
                                                                                                                                                                                                                                                                                                                                                             MEDLINE=22040717; PubMed=12044378;
Baba T., Takeuchi F., Kuroda M., Yuzawa
Nagai Y., Twama N., Asano K., Naimi T.,
Yamamoto K., Hiramatsu K.;
"Genome and virulence determinants of hi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NCBI_TaxID=158878, 158879, 196620;
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28-FEB-2003 (Rel. 41, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
28-FEB-2003 (Rel. 41, Last annotation update)
Glutamyl-tRNA synthetase (EC 6.1.1.17) (Glutamate--tRNA ligase)
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PIR; D64151; D64151.
                                                                                                                                                                                                                                                                                                                                    acquired MRSA.",
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                                                                                                                                                 CERTALYTIC ACTIVITY: ATP + L-glutamate + tRNA(Glu) = AMP + diphosphate + L-glutamyl-tRNA(Glu).

diphosphate + L-glutamyl-tRNA(Glu).

SUBUNIT: Monomer (By similarity).

SUBCELLULAR LOCATION: Cytoplasmic.

SIMILARITY: Belongs to class-I aminoacyl-tRNA synthetase family.
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Kuroda H., Cui
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Q59801;
15-DEC-1998
15-DEC-1998
30-MAY-2000
                                                                                                                                                                                                                                                                        This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the ENthe Envoyean Bioinformatics Institute. There are no restruse by non-profit institutions as long as its content modified and this statement is not removed. Usage by antentities requires a license agreement (See http://www.isb-sor send an email to license@isb-sib.ch).
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Farrell A.M., Taylor D., Holland K.T.;

"Cloning, nuclectide sequence determination and expression of the Staphylococcus aureus hyaluronate lyase gene.";

FEMS Microbiol. Lett. 130:81-85(1995).

-!- CATALYTIC ACTIVITY: Hyaluronate = N 3-(4-deoxy-beta-D-gluc-4-enuronosyl)-N-acetyl-D-glucosamine.
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EMBL; AP003130; BAB41716.1; --
EMBL; AP004823; BAB94348.1; --
PIR; A89820; A89820.
HSSP; P27000; IGLN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Staphylococcus aureus Bacteria; Firmicutes; NCBI_TaxID=1280;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               entities requires a license agreement (S or send an email to license@isb-sib.ch).
   Lyase; Signal.
SIGNAL
                                                         InterPro; IPR003159; Lyase 8.
InterPro; IPR004103; Lyase 8.
Pfam; PF02278; Lyase 8; 1.
Pfam; PF02884; Lyase 8 C; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HYSA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hyaluronate lyase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TIGREAMS; TIGR00464; gltX_bact; 1.
PROSITE; PS00178; AA_TRNA_LIGASE I; 1.
Aminoacyl-tRNA synthetase; Protein biosynthesis; Ligase;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pfam; PF00749; tRNA-synt_1c; PRINTS; PR00987; TRNASYNTHGLU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HAMAP; MF 00022; -; 1.
InterPro; IPR004527; GltX bact.
InterPro; IPR000924; Glu tRNA-synt_lc.
InterPro; IPR001412; tRNA-synt_I.
                                                                                                                                                                                                              EMBL; U21221; AAA82984.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Complete
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUBCELLULAR LOCATION: Secreted.
SIMILARITY: BELONGS TO THE POLYSACCHARIDE LYASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  318
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KOKLAWVNNOYMKOKD
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(Rel.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      37, Last sequence update)
39, Last annotation update)
precursor (EC 4.2.2.1) (Hyaluronidase) (HYase).
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37,
39,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  333
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Pred. No.
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ATP (BY SIMILARITY).
, 4CBASFF08DA23EFA CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL outstation
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
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MBL outstation -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ٥,
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                                                                                                              Query Match
Best Local S
Matches
                                                                                                                                                                                                                       EMBL; AE002142; AAF30870.1; -.

R HSSP; P27001; 1PYS.

R HAMAP; MF 00281; -; 1.

R InterPro; IPR004529; PheS.

R InterPro; IPR004529; PheS.

R InterPro; IPR002319; tRNA-synt_2d.

R InterPro; IPR002319; tRNA-synt_2d:

R InterPro; IPR002319; tRNA-synt_2d:

R InterPro; IPR002319; tRNA-synt_2d:

R InterPro; IPR002319; tRNA-synt_2d; 1.

R PIGRPAMS; TIGR00468; PheS; 1.

R PIGRPAMS; TIGR00468; PheS; 1.

R PROSITE; PS50862; AA TRNA_LIGASE II; 1.
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SEQUENCE
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Q9PQ32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This SWISS-PROT entry is copyright. It is produced through a collar between the Swiss Institute of Bioinformatics and the EMBL outst the European Bioinformatics Institute. There are no restrictions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 40, Last sequence update)
28-FBB-2003 (Rel. 41, Last annotation update)
Phenylalanyl-tRNA synthetase alpha chain (EC 6.1.1.20)
(Phenylalanine--tRNA ligase alpha chain) (PheRS).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nature 407:757-762(2000).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN=Serovar 3;
MEDLINE=20500219; Pubmed=11048724;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ureaplasma parvum (Ureaplasma urealyticum biotype 1).
Bacteria, Firmicutes; Mollicutes; Mycoplasmataceae; Ureaplasma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             similarity).
SUBCELLULAR LOCATION: Cytoplasmic.
SIMILARITY: Belongs to class-II aminoacyl-tRNA synthetase family.
Phe-tRNA synthetase alpha chain subfamily 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          diphosphate + L-phenylalanyl-tRNA(Phe).
COFACTOR: Binds 2 magnesium ions per tetramer (By similarity)
SUBUNIT: Tetramer of two alpha and two beta chains (By
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CATALYTIC ACTIVITY: ATP + L-phenylalanine + tRNA (Phe) =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         complete sequence
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9; Conserv
                                                                                                              8; Conserv
KQQIEFVTDQILKELNDK
                                                          KDSLQWITDQYNKESDDK 18
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807 j
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76
                                                                                                           Score 45; DB
Pred. No. 12;
5; Mismatches
                                                                                                              5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Glass J.S., Heiner C.R.,
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Pred. No. 2
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                                                                                                                                                                     Length 333;
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                                                                                                                                                                                                                                                                                                                      ATP-binding;
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RESULT 10
BIP3_TOBAC
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Y02B_BI
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Best Local
                                                                                                                                               01-FEB-1995 (Rel
01-FEB-1995 (Rel
16-OCT-2001 (Rel
Luminal binding I
homolog 3) (GRP
                                                                       Eukaryota; Viridiplantae; Streptophyta; Embry Spermatophyta; Magnoliophyta; eudicotyledons; Asteridae; lamiids; Solanales; Solanares; NCBI TaxID=4007
                                                                                                                                                                                                              BIP3_TOF
                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL;
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P39232;
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                                                                                                                                      BIP3.
                                                                                                                                                                                                                                                                                                                                                                                         PIR; A45681; A45681.
Hypothetical protein
SEQUENCE 60 AA; 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.

Kutter E., Arisaka F., Kunisawa T., Tsugita A., Mosig G.

Mesyanzhinov V., Ruger W., Stidham T., Thomas E.;

"Bacteriophage T4 genome analysis.";

Submitted (JUL-2000) to the EMBL/GenBank/DDBJ databases.
         MEDLINE=92361242; PubMed=1822990;
Denecke J., Goldman M.H., Demolder J.,
"The tobacco luminal binding protein i
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    modified and this statement is not removed. Usage by and for entities requires a license agreement (See http://www.isb-sibor send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           the European Bioinformatics Institute. There are no rest use by non-profit institutions as long as its content modified and this statement is not removed. Usage by an
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Selick H.E., Stormo G.D., Dyson R.L., Alberts B.M.; "Analysis of five presumptive protein-coding sequences clustered between the primosome genes, 41 and 61, of bacteriophages T4, T2,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A. MEDLINE=93188183; PubMed=8383243;
                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Viruses; dsDNA viruses, T4-like viruses.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bacteriophage T4
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Y02B OR 61.5
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                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NCBI_TaxID=10665;
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                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                        KDDVQWATTQYAEVNKALVKAFIDDK 51
                                                                                                                                                                                                                                                                                                                 KDSLQWITDQY---NKB----SDDK 18
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(Rel.
(Rel.
1 7.0 )
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0 AA; 7027 MW;
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                                                                                                                                               1. 31, Created)
1. 31, Last sequence update)
1. 40, Last annotation update)
protein 3 (BiP 3) (78 kDa glu
78-3) (Fragment).
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. 41, Last annotation update)
kDa protein in sp-Gp41 intergenic
                                                                                    Solanales; Solanaceae, Nicotiana
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                                                                                                                                                                                                                                                                                                                                                                                            A726546BE9AC74B2
                                                                                                                                                                                                                                                                                                                                                       Score 44; I
Pred. No. 2.
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           18
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           Seurinck J.,
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2.7;
                                                                                                          Embryophyta;
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           a multigene
                                                                                                 eudicots;
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                         Botterman
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                                                                                                           Tracheophyta;
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Best Local
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034852;
30-MAY-2000
30-MAY-2000
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SEQUENCE
                     MEDLINE=98044033; PubMed=9384377;
Kunst F., Ogasawara N., Moszer I., Albertini A.M., Alloni G.,
Azevedo V., Bertero M.G., Bessleres P., Bolotin A., Borchert S.,
Borriss R., Boursier L., Brans A., Braun M., Brignell S.C., Bron
Brouillet S., Bruschi C.V., Caldwell B., Capuano V., Carter N.M.
                                                                                                                     STRAIN=168;
MEDLINE=98044033;
                                                                                                                                                                   SEQUENCE
                                                                                                                                                                                                                                  Lapidus A., Galleron N., Sorokin A., Ehr. "Sequencing and functional annotation of in the 200 kb rrnB-dnaB region.";
                                                                                                                                                                                                                                                                                   MEDLINE=98048467; PubMed=9387221; Lapidus A., Galleron N., Sorokin A.,
                                                                                                                                                                                                                                                                                                                                                                                                                              Bacillus subtilis.
Bacteria; Firmicutes;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  precursor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-MAY-2000 (Rel. 39, Created)
30-MAY-2000 (Rel. 39, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
Probable amino-acid ABC transporter extracellular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Prodom; PF00012; HSP70; 1.

PRODOM; PB0000089; HSP70_1; PARTIAL.

PROSITE; PS00229; HSP70_2; PARTIAL.

PROSITE; PS01036; HSP70_3; PARTIAL.

PROSITE; PS01036; HSP70_3; PARTIAL.

PROSITE; PS01036; HSP70_3; PARTIAL.

PROSITE; PS00014; ER_TARGET; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          InterPro; IPR000886; ER_target.
InterPro; IPR001023; Hsp70.
Pfam; PF00012; HSP70; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; X60061; CAA42663.1; -. HSSP; P04475; 1DKY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     entities requires a license agreement (Some send an email to license@isb-sib.ch).
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                                                                                                                                                                                                               Microbiology 143:3431-3441(1997).
                                                                                                                                                                                                                                                                                                                                      STRAIN=168
                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SUBCELLULAR LOCATION: Endoplasmic reticulum lumen. SIMILARITY: BELONGS TO THE HEAT SHOCK PROTEIN 70 FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FUNCTION: PROBABLY PLAYS A ROLE IN FACILITATING TO MULTIMERIC PROTEIN COMPLEXES INSIDE THE ER. SUBCELLULAR LOCATION: Endoplasmic reticulum lumen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               European Bioinformatics Institute.
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165
168 AA;
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18838 MW;
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Pred. No.
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PREVENT SECRETION FROM ER (POTENTIAL).
D0089CF2219C624E CRC64;
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on of the
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Bacillus
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RESULT 12 BIP1_TOBAC ID BIP1_T AC Q03681

BIP1_TOBAC Q03681;

STANDARD;

PRT;

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                                                                                                                                           RA Entian K.D., Errington J., Fabret C., Ferrari E., Foulger D.,
RA Fritz C., Fujita M., Fujita Y., Fuma S., Galizzi A., Galleron N.,
RA Ghim S.Y., Glaser P., Goffeau A., Golightly E.J., Grandi G.,
RA Gliseppi G., Guy B.J., Haga K., Haisch J., Harwood C.R., Henaut A.,
RA Hilbert H., Holsappel S., Hosono S., Hullo M.F., Itaya M., Jones L.,
RA Horis B., Karamata D., Kasahara Y., Klaerr-Blanchard M., Xlein C.,
RA Kobayashi Y., Koetter P., Koningstein G., Krogh S., Kumano M.,
RA Kurita K., Lapidus A., Lardinois S., Lauber J., Lazarevic V.,
RA Kurita K., Lapidus A., Liu H., Masuda S., Mauel C., Medigue C.,
RA Medina N., Mellado R.P., Mizuno M., Moestl D., Nakai S., Noback M.,
RA Moone D., O'Reilly M., Ogawa K., Ogiwara A., Oudega B., Park S.H.,
RA Presecan E., Pujic P., Purnelle B., Rapoport G., Rey M., Reynolds S.,
RA Rieger M., Rivolta C., Rocha E., Roche B., Rose M., Sadaie Y.,
Sato T., Scanlan B., Schleich S., Schroeter R., Scoffone F.,
Schneich S., Schroeter R., Scoffone F.,
                                                                 Query Match
Best Local S
Matches 7
                                                                                                                                       LIPID
SEQUENCE
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                                                                                                                                                                                                                                                                                                       SubtiList; BG13885; ytmK.
InterPro; IPR001311; SBP/glu_ro
InterPro; IPR001638; SBP_bac_3
Pfam; PF00497; SBP_bac_3; 1.
SMART; SM00062; PBPb; 1.
                                                                                                                                                                                                                                                  PROSITE; PS00013; PROKAR LIPOPROTEIN; 1.
PROSITE; PS01039; SBP_BACTERIAL_3; FALSE NEG.
Hypothetical protein; Transport; Amino-acid transport; Lipoprotein;
                                                                                                                                                                                                                                                                                                                                                                                                EMBL; AP008220; AAC00326.1; -.
EMBL; Z99119; CAB14915.1; -.
EMBL; Z99118; CAB14897.1; -.
PIR; E69996; E69996.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the E the European Bioinformatics Institute. There are no rest use by non-profit institutions as long as its content modified and this statement is not removed. Usage by an entities requires a license agreement (See http://www.isb-or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                CHAIN
                                                                                                                                                                                                                  SIGNAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FUNCTION: PROBABLY PART OF A BINDING-PROTEIN-DEPENDENT TRANSPORT SYSTEM YTMKLMN FOR AN AMINO ACID.
SUBCELLULAR LOCATION: Attached to the membrane by a lipid anchor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PROTEIN FAMILY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SIMILARITY: BELONGS
257
                                                                 Similarity
7; Conserv
SLKWLGDDYSKE
                              SLOWITDOYNKE 14
                                                                                                                                                                                                                                   Signal; Complete proteome
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270
                                                                   Conservative
                                                                                                                                           AA;
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30240
                                                                                    44.48;
268
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                                                                                                                                           MW.
                                                                     Pred. No. 14;
; Mismatches
                                                                                                     Score 44;
                                                                                                                                                          EXTRACELLULAR BINDING N-ACYL DIGLYCERIDE (PR
                                                                                                                                                                                                PROBABLE AMINO-ACID ABC TRANSPORTER
                                                                                                                                                                                                                  BY SIMILARITY.
                                                                                                                                         6F16029F7B9C6638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BACTERIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      is produced through a collaboration - ormatics and the EMBL outstation -
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Ferrari E., Fou
Galizzi A.,
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                                                                                                       1;
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                                                                                                     Length 270;
                                                                                                                                                          (PROBABLE).
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RESULT 13
BIF2 TOBAC
ID BIF2 TOBAC
STANDARD; PRT; 292 AA.
AC Q03682;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Luminal binding protein 2 (BiP 2) (78 kDa gluc
BE homolog 2) (GRP 78-2) (Fragment).
GN BIF2.
OS Nicotiana tabacum (Common tobacco).
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Best Local
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SITE
SEQUENCE
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01-FBB-1995 (Rel. 31, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Luminal binding protein 1 (Bip 1) (78 kDa glucose-regulated homolog 1) (GRP 78-1) (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                        PRINTS; PR00301; HEATSHOCK70.

PRODOM; PD000089; HSp70; 1.

PROSITE; PS00299; HSP70_1; PARTIAL.

PROSITE; PS00329; HSP70_2; PARTIAL.

PROSITE; PS01036; HSP70_3; PARTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           use by non-profit institutions as long modified and this statement is not removed. entities requires a license agreement (See
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This
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HSSP; P08109; 1CKR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL; X60060; CAA42662.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              the
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Plant Cell
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE=92361242; PubMed=1822990;
Denecke J., Goldman M.H., Demolder J.,
"The tobacco luminal binding protein i
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Asteridae; lamiids; Solanales; Solanaceae; Nicotiana
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pfam; PF00012; HSP70;
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InterPro; IPR001023; Hsp70.
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                                                                                                                                                                                                                                                                                                                                                                               TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SUBCELLULAR LOCATION: Endoplasmic reticulum lumen. SIMILARITY: BELONGS TO THE HEAT SHOCK PROTEIN 70 FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ecke J., Goldman M.H., Demolder J., Seurinck J., 
nt Cell 3:1251-1251(1991).
FUNCTION: PROBABLY PLAYS A ROLE IN FACILITATING 
MULTIMERIC PROTEIN COMPLEXES INSIDE THE ER.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SWISS-PROT entry is copyright. It is produced through a collaboration een the Swiss Institute of Bioinformatics and the EMBL outstation -
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                                                                                                                                                                                                                                                                                                                                                                                                            PS00014;
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287
290
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/ta; Magnoliophyta; eudicotyledons; core eudicots;
                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                            Endoplasmic reticulum; Multigene family.
                                                                                                                                                                                                                                                                                                                                A,
                                                                                                                                                                                                                                                                                                                                                                                                            ER TARGET;
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290
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35.3%;
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PREVENT SECRETION FROM ER (POTENTIAL).
E80F65136E64BF89 CRC64;
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                                                update)
kDa glucose-regulated protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             There are no restrictions ong as its content is in
                                                                                                                                                                                                                                                                                               Length 290;
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RESULT 14
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Best Local S
Matches 6
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Q1-FEB-1995 (Rel. 31, Created)

Q1-FEB-1995 (Rel. 31, Last sequence update)

16-OCT-2001 (Rel. 40, Last annotation updat

Luminal binding protein 8 (BiP 8) (78 kDa g

homolog 8) (GRP 78-8) (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CARBOHYD
SITE
                                                                                   Spermatophyta; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Asteridae; lamida; Solanales; Solanaceae Nicolio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRINTS; PR00301; HEATSHOCK70.

Prodom; PD000089; Hsp70; 1.

PROSITE; PS00297; HSP70_1; PARTIAL.

PROSITE; PS00329; HSP70_2; PARTIAL.

PROSITE; PS01036; HSP70_3; PARTIAL.

PROSITE; PS00014; ER_TARGET; 1.
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PIR; PQ0262; S21878.
HSSP; P08109; 1CKR.
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SEQUENCE FROM N.A.
MEDLINE=92361242; PubMed=1822990;
                                                                                                                                                                                                                                                                                                                                                                            BIPS_TOBAC
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    -1- SUBCELLULAR LOCATION: Endoplasmic reticulum lumen.
    -1- SIMILARITY: BELONGS TO THE HEAT SHOCK PROTEIN 70 FAMILY.

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Plant Cell 3:1251-1251(1991)
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MEDLINE=92361242; PubMed=1822990;
Denecke J., Goldman M.H., Demolde
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                                                                      NCBI_TaxID=4097;
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InterPro; IPR001023; Hsp70.
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292 /
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292 PREVENT SECRETION F
32260 MW; 6E7A4F5107C6E2D5
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Denecke J.,

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Best Local S
Matches 6
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P03857;
21-JUL-1986 (Rel. 01, C
01-FEB-1996 (Rel. 33, L
01-FEB-1996 (Rel. 33, L
STAAU
PRE1_S
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PROSITE;
ATP-bindi
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the Euro
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Plant ([2]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                use by non-profit institutions as long as its content modified and this statement is not removed. Usage by an entities requires a license agreement (See http://www.isb-or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Denecke J., Goldman M.H., Demolder J., Seurinck J., Botterma Plant Cell 3:1251-1251(1991).

-i- FUNCTION: PROBABLY PLAYS A ROLE IN FACILITATING THE ASSE MULTIMERIC PROTEIN COMPLEXES INSIDE THE ER.

-i- SUBCELLULAR LOCATION: Endoplasmic reticulum lumen.

-i- SIMILARITY: BELONGS TO THE HEAT SHOCK PROTEIN 70 FAMILY.
                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                 Staphylococcus aureus. Plasmid pE194.
                                                                                                                                                                                          PRE OR MOB.
                                                                                                                                                                                                       Plasmid recombination
                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                          NON TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRINTS; PR00301; HEATSHOCK70.

PRODOM; PD000089; HBP70; 1.

PROSITE; PS00299; HSP70_1; PARTIAL.

PROSITE; PS00329; HSP70_2; PARTIAL.

PROSITE; PS01036; HSP70_3; PARTIAL.

PROSITE; PS00014; ER_TARGET; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 InterPro; IPR000886; ER target.
InterPro; IPR001023; Hsp70.
Pfam; PF00012; HSP70; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL; X60062; CAA42664.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This
                                                                                                                                            NCBI_TaxID=1280;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PIR; S21881; S21881.
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les 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              European Bioinformatics Institute.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SWISS-PROT entry is copyright. It is produced through a collakeen the Swiss Institute of Bioinformatics and the EMBL outst
European Bioinformatics Institute. There are no restrictions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cke J., Goldman M.H., Demolder J., Seurinck J., Botterman J.; tobacco luminal binding protein is encoded by a multigene
                                                                                                                                                                                                                                                               STAAU
                                                                                                                                                                                                                                                                                                                          235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 inding; Endoplasmic reticulum; Multigene family.
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290
293 AA;
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293
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Last annotation update)
enzyme (Mobilization protein).
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                                                                                                                                                        Bacillales;
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Pred. No.
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PREVENT SECRETION FROM ER (POTENTI
                                                                                                                                                                                                                                                                PRT;
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                                                                                                                                                        Staphylococcus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             collaboration
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Matches 7
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Pfam; PF01076; Mob_Pre; 1.
Plasmid; DNA-binding:
BINDING 45
BINDING 115 115
                                                                                                                                                                                                                                     entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                 This SWISS-PROT entry is copyright. It is produced through a collat between the Swiss Institute of Bioinformatics and the EMBL outset the European Bioinformatics Institute. There are no restrictions use by non-profit institutions as long as its content is in modified and this statement is not removed. Usage by and for commodified and this statement is not removed. Usage by and for commodified and this statement is not removed.
                                                                                                                            SEQUENCE
                                                                                                                                                                                                                         EMBL; V01278; CAA24593.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                <del>-</del>
                                                                                                                                                                                                                                                                                                                                                                                                                                              <del>-</del>
                                                                                                                                                                                                                                                                                                                                                                                               MISCELLANBOUS: PRE PROTEINS CONTAIN CONSERVED POSITIVELY CHARGED AMINO ACIDS PROBABLY INVOLVED IN THE BINDING OF THE PRE PROTEIN THE RSA SITE.
SIMILARITY: TO OTHER PRE PROTEINS (FROM PLASMIDS PUBLIO, PMV158,
                                                                                                                                                                                                                                                                                                                                                                                  PE194, PT181, PTB913), IN THEIR N-TERMINAL ONLY.
 105
                               -
                                                                            Similarity
                               KDSLQWITDQYNKES
KDSLEFLENEYGKEN
                                                                                                                            403 AA;
                                                               Conservative
                                                                                                                                                                                     Pre; 1.
                                                                                                                            47839 MW;
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                                                                            Score 44; DB
Pred. No. 21;
                                                                                                                            DNA (POTENTIAL).
DNA (POTENTIAL).
; 875867A394000FC1 CRC64;
                                                              Mismatches
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Search Job tim time: 3.32258 January 58 secs 21, 2004, 12:07:21

Wed Jan 21 12:38:39 2004

GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein protein search, using sw model

Run on: January 21, 2004, 12:04:49 ; Search time 3.25161 Seconds (without alignments) 532.362 Million cell updates/sec

US-09-941-314-7 99

Title: Perfect score: Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5

KDSLQWITDQYNKESDDK 18

Scoring table:

Searched: 283308 seqs, 96168682 residues

Total number of hits satisfying chosen parameters: 283308

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database : PIR_76:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	80	7	6	ហ	4.	ω	N	1	ult No.	
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D57282	T46574	S21880	S21879	T06358	T04080	T04078	H97214	G97913	E95043	JQ0966	QQSA4E	S21881	S21878	S21877	E69996	A45681	H86222	B81413	C82888	E82710	E96786	A89820	T00398	B90451	D64151	AHAOLA	E90016	T33117 .		
ankyrin-related pr	dnaK-type molecula			dnaK-type molecula			endoglucanase, fam	phosphogluconate d	hypothetical prote	dnaK-type molecula	hypothetical prote	dnaK-type molecula	dnaK-type molecula	dnaK-type molecula	amino acid ABC tra	hypothetical 7K pr	hypothetical prote	probable two-compo	phenylalanine-tRNA	conserved hypothet	protein F10A5.13 (glutamyl-tRNA synt	hypothetical prote	glycosyltransferas	hypothetical prote	nucleoprotein N -	hyaluronate lyase	prot	: <u> </u>	

RESULT 2 E90016

hyaluronate lyase precursor [imported] - Staphylococcus aureus (strain N315) C;Species: Staphylococcus aureus C;Date: 10-May-2001 #sequence_revision 10-May-2001 #text_change 22-Oct-2001 C;Accession: B90016

R.Kuroda, M.; Ohta, T.; Uchiyama, I.; Baba, T.; Yuzawa, H.; Kobayashi, I.; Cui, L.; Oguc ma, A.; Mizutani-Ui, Y.; Kobayashi, N.; Sawano, T.; Inoue, R.; Kaito, C.; Sekimizu, K.; C.; Shiba, T.; Hattori, M.; Ogasawara, N.; Hayashi, H.; Hiramatsu, K. Lancet 357, 1225-1240, 2001

A;Title: Whole genome sequencing of meticillin-resistant Stapylococcus aureus.
A;Reference number: A89758; MUID:21311952; PMID:11418146
A;Accession: E90016
A;Accession: E90016
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-809 <KUR>
A;Cross-references: GB:BA000018; PID:g13702002; PIDN:BAB43294.1; GSPDB:GN00149
A;Experimental source: strain N315
C;Genetics:

4 4 4 5 4 3	440 421	37 38	ωωω 4 7 8	30 32 33
42.5	44	443 433	43 43	444 4400
43.4 43.4 42.9	43.4 43.4	43.4 43.4	43.4 43.4	444 444 43.4 44.4
863 2285 789	504 646 783	367 401 485	300 345 348	1002 5170 119 139
N N N	N N N	227	N N N	N N N N
AE0525 T12796 H83354	S54744 G85056 T38891	S29871 F97260 E83663	T34213 T25863 I50107	T30546 T15348 T22029 A45361
outer membrane usn probable transglyc probable TonB-depe	cellulase (EC 3.2. probable receptor-hypothetical prote	inic eriz ERNA	hypothetical prote hypothetical prote MHC class I histoc	

ALIGNMENTS

	hypothetical protein B0511.9 - Caenorhabditis elegans (;Species: Caenorhabditis elegans C;Date: 29-Oct-1999 #sequence_revision 29-Oct-1999 #text_change 09-Jun-2000 C;Accession: T33117 R;Tin-Wollam, A.; Sutterer, C.; Ozersky, P. submitted to the EMBL Data Library, May 1998 A;Description: The sequence of C. elegans cosmid B0511. A;Reference number: Z21285 A;Accession: T33117 A;Status: preliminary; translated from GB/EMBL/DDBJ A;Accession: T33117 A;Accession: T33117 A;Accession: T33117 A;Cross-references: EMBL:AF067608; PIDN:AAC17648.1; GSPDB:GN00019; CESP:B0511.9 A;Cross-references: EMBL:AF067608; PID	RESULT 1
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glycosyltransferase, probable [imported] - Sulfolobus solfataricus C;Species: Sulfolobus solfataricus C;Date: 24-May-2001 #sequence_revision 24-May-2001 #text_change 24-C;Accession: B90451
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A;Cross-references: GB:U32723; GB:L42023; NID:g1573363; PIDN:AAC22063.1;
A;Note: best homolog was a hypothetical protein from Bacillus subtilis
                                                                                                                                                                                                                                                                                                                                                                                                                                                           R;Fleischmann, R.D.; Adams, M.D.; White, O.; Clayton, R.A.; Kirkness, E.F.; Kerlavage, Gocayne, J.D.; Scott, J.; Shirley, R.; Liu, L.I.; Glodek, A.; Kelley, J.M.; Weidman, D.M.; Brandon, R.D.; Frine, L.D.; Fritchman, J.L.; Fuhrmann, J.L.; Geoghagen, N.S.M. Science 269, 496-512, 1995
A;Authors: Gnehm, C.L.; McDonald, L.A.; Small, K.V.; Fraser, C.M.; Smith, H.O.; Venter, A;Tille: Whole-genome random sequencing and assembly of Haemophilus influenzae Rd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     R;Akashi, H.; Bishop, D.H.L.
J. Virol. 45, 1155-1158, 1983
A;Title: Comparison of the sequences and coding of La Crosse
A;Reference number: A92989; MUID:83164355; PMID:6834480
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                                                                             B90451
                                                                                                                                                                                                                                                                                                          A; Note: best hord: C; Superfamily:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C;Date: 18-Aug-1995 #sequence_revision 18-Aug-1995 #text_change 09-Dec-2002
C;Accession: D64151
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                                                                                                RESULT 5
                                                                                                                                                                                                                                                                                                                                                                                    A; Molecule type: DNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hypothetical protein HI0404 - Haemophilus influenzae (strain Rd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Molecule type: genomic RNA
A; Residues: 1-235 < AXA>
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;Species: La Crosse virus
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Date: 30-Jun-1987 #sequence_revision 30-Jun-1987 #text_change 16-Jul-1999
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                                                                                                                                                                                            KDSLQWITDQYNKES 15
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47.4%;
                                                                                                                                                                                                                                                 47.5%; Score 47; 46.7%; Pred. No.
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Pred. No. 9.4;
4; Mismatches
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Pred. No. 31
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                 24-May-2001 #text_change 24-May-2001
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                                                                                                                                                                                                                                                     DB 2;
18;
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                                                                                                                                                                                                                                                                                                                                                PID:g1573375;
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                                                                             RESULT 7
A89820
glutamyl-tRNA synthetase [imported] - C;Species: Staphylococcus aureus C;Date: 10-May-2001 #sequence_revision C;Accession: A89820
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hypothetical protein At2944950 [imported] - Arabidopsis thaliana W;Alternate names: hypothetical protein T13E15.4 C;Species: Arabidopsis thaliana (mouse-ear cress) C;Date: 01-Feb-1999 #sequence_revision 01-Feb-1999 #text_change C;Accession: T00398; G84884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       R;She, Q.; Singh, R.K.; Confalonieri, F.; Zivanovic, Y.; Allard, G.; Awayez, M.J.; Chan-1 Jong, I.; Jeffries, A.C.; Kozera, C.J.; Medina, N.; Peng, X.; Thi-Ngoc, H.P.; Redder, P arrett, R.A.; Ragan, M.A.; Sensen, C.W.; Van der Oost, J. submitted to GenBank, April 2001
A;Description: Sulfolobus solfataricus complete genome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Cross-references: GB:AE006641; NID:g13816086; PIDN:AAK42865.1; GSPDB:GN00155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Molecule type: DNA
A; Residues: 1-437 < KUR>
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A; Accession: B90451
                                                                                                                                                               RESULT 6
                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Gene: SS02755
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8; Conserv
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Pred. No. 19;
5; Mismatches
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                                          #text_change 16-Feb-2001
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S.M.;
  Maso
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A;Cross-references: EMBL:AC002388; NID:g3420042; PID:g2344889
A;Experimental source: cultivar Columbia
R;Lin, X.; Kaul, S.; Rounsley, S.D.; Shea, T.P.; Benito, M.I.; Town, C.D.; Fujii, C.Y.; P.M.; Koo, H.; Moffat, K.S.; Cronnin, L.A.; Shen, M.; VanAken, S.E.; Umayam, L.; Tallon, L.; euss, D.; Nierman, W.C.; White, O.; Eisen, J.A.; Salzberg, S.L.; Fraser, C.M.; Venter, J. Nature 402, 761-768, 1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Title: Sequence and analysis of chromosome 2 of the plant Arabidopsis thaliana. A;Reference number: A84420; MUID:20083487; PMID:10617197 A;Accession: G84884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R;Rounsley, S.D.; Lin, X.; Ketchum, submitted to the EMBL Data Library, A;Description: Arabidopsis thaliana
                                                                                                                                                                                                      F;462-510/Domain: RING finger homology <RRN>
                                                                                                                                                                                                                                    A; Introns: 12/1; 85/1; 138/3; 162/3; 188/2; 253/2; C; Superfamily: RING finger homology
                                                                                                                                                                                                                                                                                                                                                                                           A; Residues: 1-518 <STO>
                                                                                                                                                                                                                                                                                        A; Map position:
                                                                                                                                                                                                                                                                                                                 A; Gene: T13E15.4; At2g44950
                                                                                                                                                                                                                                                                                                                                                                     A;Cross-references: GB:AE002093; NID:g4895255;
                                                                                                                                                                                                                                                                                                                                                                                                                       A; Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Status: preliminary
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                                                                                                                              Local
350
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                                              KDSLOWITDOYNKESDDK 18
                                                                                                     Conservative
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Data Library, July 1997
psis thaliana chromosome II BAC T13E15 genomic sequence.
                                                                                                                           47.5%;
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                                                                                                   Score 47; DB Pred. No. 23; 6; Mismatches
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                                                                                                                                                       Length 518;
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#sequence_revision 10-May-2001 #text_change 22-Oct-2001

Staphylococcus aureus (strain N315)

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RiTheologis, A.; Ecker, J.R.; Palm, C.J.; Federspiel, N.A.; Kaul, S.; White, C.Chin, C.W.; Chung, M.K.; Conn, L.; Conway, A.B.; Conway, A.R.; Creasy, T.H.; ansen, N.F.; Hughes, B.; Huizar, L.
Nature 408, 816-820, 2000

Nature 408, 816-820, 2000

Naturbors: Hunter, J.L.; Jenkins, J.; Johnson-Hopson, C.; Khan, S.; Khaykin, E.C.A.; Li, Y.; Lin, X.; Liu, S.X.; Liu, Z.A.; Luros, J.S.; Maiti, R.; C.A.; Li, J.H.; Li, Y.; Lin, X.; Liu, S.X.; Liu, J.A.; Luros, J.S.; Maiti, R.; Rizzo, M.; Rooney, T.; Rowley, D.; Sakano, H.
Rizzo, M.; Rooney, T.; Rowley, D.; Sakano, H.
A;Authors: Salzberg, S.L.; Schwartz, J.R.; Shinn, P.; Southwick, A.M.; Sun, H.
Rer, M.; Wu, D.; Yu, G.; Fraser, C.M.; Venter, J.C.; Davis, R.W.
A;Reference and analysis of chromosome 1 of the plant Arabidopsis.

A;Reference number: A86141; MUID:21016719; PMID:11130712
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A;Title: Whole genome sequencing of meticillin-resistant Stapylococcus aureus.

A;Reference number: A89758; MUID:21311952; PMID:11418146

A;Accession: A89820
                                                                                                                                                                                conserved hypothetical protein XF1198 [imported] - Xylella fastidiosa (strain C;Species: Xylella fastidiosa C;Date: 18-Aug-2000 #sequence_revision 20-Aug-2000 #text_change 20-Aug-2000
                                                                                                                                                                                                                                                                    RESULT
B82710
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C;Superfamily: Arabidopsis membrane-anchored cellulase
A;Title: The genome sequence of the plant pathogen Xylella fastidiosa. A;Reference number: A85515; MUID:20365717; PMID:10910347 A;Note: for a complete list of authors see reference number A59328 bel A;Accession: E82710
                                                                                                       C;Accession: E82710 R;anonymous, The Xylella fastidiosa Consortium of the Organization for Nucleotide Nature 406, 151-157, 2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   protein F10A5.13 [imported] - Arabidopsis thaliana
C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Date: 02-Mar-2001 #sequence_revision 02-Mar-2001 #text_change 23-Mar-2001
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A;Experimental source: strain N315
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A;Accession: E96786
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Best Local S
Matches 8
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Best Local
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8; Conservat
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Pred. No.
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Pred. No.
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                                 A59328 below
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R;Simpson, A.J.G.; Reinach, F.C.; Arruda, P.; Abreu, F.A.; Acencio, M.; Alvarenga, R.; A Briones, M.R.S.; Bueno, M.R.P.; Camargo, A.A.; Camargo, L.E.A.; Carraro, D.M.; Carrer, H. Briones, M.R.S.; Bueno, M.R.P.; Camargo, A.A.; Camargo, L.E.A.; Carraro, D.M.; Carrer, H. as-Neto, E.; Docena, C.; El-Dorry, H.; Facincani, A.P.; Ferreira, A.J.S. submitted to GenBank, June 2000

A;Authors: Ferreira, V.C.A.; Ferro, J.A.; Fraga, J.S.; Franca, S.C.; Franco, M.C.; Frohm, J.D.; Junqueira, M.L.; Kemper, B.L.; Kitajima, J.P.; Krieger, J.E.; Kuramae, E.E.; Laigr. Chado, M.A.; Madeira, A.M. M.F.; Marino, C.L.; Marques, M.V.; Martins, E.A.; Mandedira, H.M.F.; Marino, C.L.; Marques, M.V.; Martins, E.A.; Machara, M.R.; Machara, A.Y.; Manck, C.F.M.; Miracca, E.C.; Miyaki, C.Y.; A;Authors: Martins, E.M.F.; Mateukuma, A.Y.; Menck, C.F.M.; Miracca, E.C.; Miyaki, C.Y.; F.G.; Nunes, L.R.; Oliveira, M.A.; de Oliveira, M.C.; de Oliveira, R.C.; Palmieri, D.A., F.G.; Nunes, L.R.; Oliveira, M.A.; de Rosa Jr., V.E.; de Sa, R.G.; Santelli, R.V.; Sawasak, A;Authors: da Silva, A.C.R.; da Silva, F.R.; da Silva, A.M.; Silva Jr., W.A.; da Silveira, M.; Tsuhako, M.H.; Vallada, H.; Van Sluys, M.A.; Verjovski-Almeida, S.; Vettore, A.L.; Z.A.; Reference number: A59328
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C82888
                                                                                                                                                                                                                                                                               A;Molecule type: DNA
A;Rolecule type: DNA
A;Residues: 1-333 <GLA>
A;Cross-references: GB:AE002142; GB:AF222894; NID:g6899447; PIDN:AAF30870:1; GSPDB:GN001
A;Cross-references: GB:AE002142; GB:AF222894; NID:g6899447; PIDN:AAF30870:1; GSPDB:GN001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   phenylalanine-tRNA synthetase alpha chain UU458 [imported] - Ureaplasma urealyticum C;Species: Ureaplasma urealyticum C;Date: 18-Aug-2000 #sequence_revision 20-Aug-2000 #text_change 02-Sep-2000 C;Accession: C82888
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A;Genetic code: SGC3
C;Superfamily: phenylalanine-tRNA ligase alpha chain
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A; Accession: C82888
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                                                                                                      Matches
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8; Conserv
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KQQIBFVTDQILKELNDK
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Pred. No. 10;
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C;Accession: B81413
R;Parkhill, J.; Wren, B.W.; Mungall, K.; Ketley, J.M.; Churcher, C.; Basham, D.; Chillin C.W.; Quail, M.; Rajandream, M.A.; Rutherford, K.M.; VanVliet, A.; Whitehead, S.; Barrel Nature 403, 665-668, 2000
A;Title: The genome sequence of the food-borne pathogen Campylobacter jejuni reveals hypolyReference number: A81250; MUID:20150912; PMID:10688204

probable two-component response regulator Cj0643 [imported] - Campylobacter jejuni (stra. C;Species: Campylobacter jejuni (c;Species: Campylobacter jejuni (c;Date: 31-Mar-2000 #text_change 14-Apr-2003 C;Date: 31-Mar-2000 #text_change 14-Apr-2003

B81413 RESULT 11

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A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-414 <PAR>
A;Cross-reference
                   A;Molecule type: DNA
A;Residues: 1-60 <SEL>
A;Residues: 1-60 <SEL>
A;Cross-references: GB:S57514; NID:g298518; PIDN:AAB25708.1; PID:g298519
A;Note: sequence extracted from NCBI backbone (NCBIN:128289, NCBIP:128290)
C;Genetics:
A;Map
                                                                                                                                                               R;Selick, H.E.; Stormo, G.D.; Dyson, R.L.; Alberts, B.M.
J. Virol. 67, 2305-2316, 1993
A;Title: Analysis of five presumptive protein-coding sequences clustered between the pri A;Reference number: A45681; MUID:93188183; PMID:8383243
A;Accession: A45681
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Authors: Hunter, J.L.; Jenkins, J.; Johnson-Hopson, C.; Khan, S.; Khaykin C.A.; Li, J.H.; Li, Y.; Lin, X.; Liu, S.X.; Liu, Z.A.; Luros, J.S.; Maiti, I Rizzo, M.; Rooney, T.; Rowley, D.; Sakano, H.
A;Authors: Salzberg, S.L.; Schwartz, J.R.; Shinn, P.; Southwick, A.M.; Sun, ker, M.; Wu, D.; Yu, G.; Fraser, C.M.; Venter, J.C.; Davis, R.W.
A;Title: Sequence and analysis of chromosome 1 of the plant Arabidopsis.
A;Reference number: A86141; MUID:21016719; PMID:11130712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R;Theologis, A.; Ecker, J.R.; Palm, C.J.; Federspiel, N.A.; Kaul', S.; White, Chin, C.W.; Chung, M.K.; Conm, L.; Conway, A.B.; Conway, A.R.; Creasy, T.H.; ansen, N.F.; Hughes, B.; Huizar, L. Nature 408, 816-820, 2000
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C;Superfamily: response regulator with a receiver and a diguanylate
                                                                                                                                                                                                                                                                                                                                   C;Species: phage T4
A;Note: host Echerichia coli
                                                                                                                                                                                                                                                                                                                                                                                  hypothetical 7K protein (gene 61.5 protein) - phage T4
N;Alternate names: gp 61.5
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A; Residues: 1-655 <STO>
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C;Species: Arabidopsis thallana (mouse-ear cress)
C;Date: 02-Mar-2001 #sequence_revision 02-Mar-2001 #text_change 31-Mar-2001
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                                                                                                                                                                                                                                                                                   Date: 21-Sep-1993 #sequence_revision 18-Nov-1994 #text_change Accession: A45681; JS0558
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Gene: Cj0643
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;Experimental source: serotype O2, strain NCTC 11168
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  position: 20.378-20.558
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47.1%; Pred. No.
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Maiti, R.; Marziali
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R;Kunst, F.; Ogasawara, N.; Moszer, I.; Albertini, A.M.; Alloni, G.; Azevedo, V.; Bertero C.; Bron, S.; Brouillet, S.; Bruschi, C.V.; Caldwell, B.; Capuano, V.; Carter, N.M.; Choi A.; Ehrlich, S.D.; Emmerson, P.T.; Entian, K.D.; Errington, J.; Fabret, C.; Ferrari, E. Nature 390, 249-256, 1997

A;Authors: Foulger, D.; Fritz, C.; Fujita, M.; Fujita, Y.; Fuma, S.; Galizzi, A.; Gallero iech, J.; Harwood, C.R.; Henaut, A.; Hilbert, H.; Holsappel, S.; Hosono, S.; Hullo, M.F. Koetter, P.; Koningstein, G.; Krogh, S.; Kumano, M.; Kurita, K.; Lapidus, A.; Lardinois, A;Authors: Lauber, J.; Lazarevic, V.; Lee, S.M.; Levine, A.; Liu, H.; Masusda, S.; Maueel Y., M.; Ogawa, K.; Ogiwara, A.; Oudega, B.; Park, S.H.; Parro, V.; Pohl, T.M.; Portetelle Rieger, M.; Rivolta, C.; Rocha, E.; Roche, B.; Rose, M.; Sadale, Y.; Sato, T.; Scanlon, A;Authors: Schleich, S.; Schroeter, R.; Scoffone, F.; Sekiguchi, J.; Sekowska, A.; Seror akeuchi, M.; Tamakoshi, A.; Tanaka, T.; Terpstra, P.; Tognoni, A.; Tosato, V.; Uchyama, T.; Winters, P.; Wipat, A.; Yamamoto, H.; Yamane, K.; Yasumoto, K.; Yata, K.; Yoshida, K., Authors: Yoshikawa, H.F.; Zumstein, E.; Yoshikawa, H.; Danchin, A.
A;Tile: The complete genome sequence of the Gram-positive bacterium Bacillus subtilis. A; Reference number: A6580; MUID:98044033; PMID:9384377
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E69996
                  A;Cross-references: EMBL:X60060; NID:g19804; PIDN:CAA42662.1; PID:g19805 R;Denecke, J.; Goldman, M.H.S.; Demolder, J.; Seurinck, J.; Botterman, J. Plant Cell 3, 1025-1035, 1991 A;Title: The tobacco luminal binding protein is encoded by a multigene family. A;Reference number: JQ1360; MUID:92361242; PMID:1822990
                                                                                                                                                                                                                                                               A;Description: The luminal A;Reference number: S21877 A;Accession: S21877
                                                                                                                                                                           A; Molecule type: mRNA
A; Residues: 1-290 < DEN>
                                                                                                                                                                                                                                      A;Status: preliminary
                                                                                                                                                                                                                                                                                                                             submitted to the EMBL Data Library, June 1991
A;Description: The luminal binding protein (BiP)
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N;Alternate names: luminal binding protein blp1
C;Species: Nicotiana tabacum (common tobacco)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Experimental source: strain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Cross-references: GB:Z99118; GB:Z99119; GB:AL009126; NID:g2635411; PIDN:CAB14915.1;
A;Experimental source: strain 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Residues: 1-270 < KUN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Status: preliminary; nucleic acid sequence not shown; translation not
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C;Date: 05-Dec-1997 #sequence_revision 05-Dec-1997 #text_change 20-Jun-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   amino acid ABC transporter (binding protein) homolog ytmK - Bacillus subtilis
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A; Accession: PQ0264
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                                                                                                                                                                                                                                                                                                                                                                                                                                          Date: 07-Apr-1994 #sequence_revision 07-Apr-1994 #text_change 20-Aug-1999
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A; Residues: 253-290 cDRN-
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Post-processing: Minimum Match 0%
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Listing first 45 summaries
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sp_unclassified:*
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Q8k5a3 rattus norv
Q61819 caenorhabdi
Q8t7y7 caenorhabdi
Q8t7y7 caenorhabdi
Q9sbn2 volvox cart
Q86983 galleria me
Q39107 bunyavirus
Q97225 plasmodium
Q8sdq4 staphylococ
Q8nwj3 staphylococ
Q9m4e8 cucumis sat
Q9fey7 corylus ave
Q926n4 listeria in
Q93r01 lactococcus
Q8sie31 plasmodium
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OSWXUS; PTEMBLrel. 20, Created)
01-MAR-2002 (TremBLrel. 20, Last sequence update)
01-JUN-2002 (TremBLrel. 21, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (Human).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
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Q8srq0 encephalito	Q40924 pseudotsuga		Q39804 glycine max	Q8nza4 streptococc	Q9xdc5 streptococc	Q97g16 clostridium		097si6 streptococc	Q8r5p1 fusobacteri							Q9phm4 campylobact	7	<								Q8jpr0 bunyavirus		Q99s67 staphylococ

ALIGNMENTS

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RESULT 2
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01-MAR-2002
01-MAR-2002
01-JUN-2002
 SC13.
                                                                                                                                                                                                                                                                                     Hamil K.G., Liu Q., Zhang Y.-L., French F.S., Hall S.H.;
"SC13: A novel epididymal specific member of the cystatin family.";
Submitted (JAN-2001) to the EMBL/GenBank/DDBJ databases.
EMBL; AF335481; AAL71992.1; -.
InterPro; IPR000010; Cystatin.
Pfam; PF00031; cystatin; 1.
SEQUENCE 103 AA; 12285 MW; 05DD92C47387B022 CRC64;
                                                                                                                                                                                                                         y Match 100.0%; 9
Local Similarity 100.0%; 1
hes 18; Conservative 0;
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                                                                                                                                                             KDSLOWITDOYNKESDDK 62
                2 (TrEMBLrel. 20,
2 (TrEMBLrel. 20,
2 (TrEMBLrel. 21,
                                                                                PRBLIMINARY;
               Created)
Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                        Score 99; DB 4;
Pred. No. 1.5e-07;
                                                                                                                                                                                                                            Mismatches
                                                                                  138
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RESULT
OBKSAJ
ID Q8
AC Q8
DT 011
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DT 01
RP CS
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RP SE
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Best Local S
Matches 8
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Best Local S
Matches 18
                                                                                                                                                                                              O61819;
O61819;
O1-AUG-1998
O1-OCT-2001
O1-MAR-2003
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01-OCT-2002
01-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hamil K.G., Liu Q., Zhang Y.-L., French F.S., Hall S.H.; "SC13: A novel epididymal specific member of the cystatin submitted (JAN-2001) to the EMBL/GenBank/DDBJ databases. EMBL; AP335480; AAL71991.1; -. InterPro; IPR000010; Cystatin. Pfam; PF00031; Cystatin; 1. SMART; SM000043; CY; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRAIN-Sprague-Dawley;
Hamil K.G., Hall S.H.;
Submitted (Apr-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; AF501290; AAM21709.1; -.
InterPro; IPR000010; Cystatin.
Pfam; PF00031; cystatin; 1.
SMART; SM00043; CY; 1.
SEQUENCE 139 AA; 16686 MW; E1E36DB786B4D08C CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q8K5A3
Q8K5A3;
SEQUENCE FROM N.A. STRAIN-Bristol N2;
                                                                                     Eukaryota; Metazoa; Nemato
Rhabditidae; Peloderinae;
                                                                                                                                Caenorhabditis elegans.
                                                                                                                                                      Hypothetical
B0511.9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Rattus norvegicus (Rat),
Eukaryota; Metazoa; Chordata;
Mammalla; Eutheria; Rodentia;
NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Cystatin 11.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (Human)
Eukaryota; Metazoa;
Mammalia; Eutheria;
                                            NCBI_TaxID=6239;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
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8; Conserv
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                                                                                                                                                                        (TIEMBLIFE). 07, Created)
(TIEMBLIFE). 18, Last sequence update)
(TIEMBLIFE). 23, Last annotation update)
1 21.2 kDa protein.
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Primates;
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                                                                                                         Nematoda;
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                                                                                     oda; Chromadorea; Rhabditida; Rhabditoidea;
Caenorhabditis.
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Last sequence up
Last annotation
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Pred. No.
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Pred. No.
                                                                                                                                                                                                                                                                                    PRT;
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Sciurognathi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRT;
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thi; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 11; Length 139;
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RESULT 5
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Best Local Similarity
Matches 8; Conserv
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Q8T7Y7;
Q1-JUN-2002
Q1-JUN-2002
Q1-MAR-2003
                                                                                   WormPep; B051
Hypothetical
SEQUENCE 20
                                                                                                               Waterston R.;
Submitted (APR-2002) to the
EMBL; AF067608; AAM15538.1;
WormPep; B0511.9; CE17348.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
STRAIN-Bristol N2;
Tin-Wollam A., Sutterer C.,
"The sequence of C. elegans
Submitted (MAY-1998) to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WormPep; B0511.9a; CE
Hypothetical protein.
SEQUENCE 194 AA; 2
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                                                                                                                                                                                                                                                                        Tin-Wollam A., Sutterer C., "The sequence of C. elegans Submitted (MAY-1998) to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
STRAIN=Bristol N2;
MEDLINE=99069613;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Caenorhabditis elegans.
Caenorhabditis elegans.
Eukaryota; Metazoa; Nematoda; Chromadorea;
Eukaryota; Metazoa; Caenorhabditis.
                                                                                                                                                                                                          STRAIN-Bristol N2;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NCBI_TaxID=6239;
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B0511.9.
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                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                 "Genome sequence of the nema
investigating biology. The C
Science 282:2012-2018(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Genome sequence of the nematode C. elegans: a platform for investigating biology. The C. elegans Sequencing Consortium."; Science 282:2012-2018(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  None;
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                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
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Similarity
8; Conserv
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                                                                                   205 AA; 2
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                                                                                      22520 MW;
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                     53.5%;
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cosmid B0511.";
EMBL/GenBank/DDBJ
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cosmid B0511.";
EMBL/GenBank/DDBJ
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                     Score 53; D
Pred. No. 3;
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Pred. No. 2.
                                                                                      96036895513A34A7 CRC64;
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    Mismatches
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                                           Length 205;
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    Indels
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RESULT

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AC Q9

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InterPro; IPR005788; Disulph isom.
InterPro; IPR005886; ER target.
InterPro; IPR006862; ThTored.
InterPro; IPR006662; ThTored.
InterPro; IPR006663; Thioredox dom2.
Pfam; PP00085; Thiored; 2.
PRINTS; PR00421; THIOREDOXIN.
TIGRPAMS; TIGR01130; ER PDI fam; 1.
TIGRPAMS; TIGR01130; ER PDI fam; 1.
PROSITE; PS000194; ER TARGET; 1.
PROSITE; PS000194; THTOREDOXIN; 2.
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Q86983;
01-NOV-1996
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01-MAY-2000
01-MAR-2003
                                                                                                                        SEQUENCE FACTOR OF TRANSPOSON=hitchhiker;
TRANSPOSON=hitchhiker;
MEDLINE=96187810; PubMed=8614994;
Bauser C.A., Elick T.A., Fraser M.J.;
"Characterization of hitchhiker, a transposon insertion frequently
"Characterization of hitchhiker, a transposon insertion frequently
"Characterization of hitchhiker, a transposon insertion frequently
"The state of the 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Galleria mellonella nuclear Viruses; dsDNA viruses, no F Nucleopolyhedrovirus.
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Meissner M., Stark K., Cresnar B., Kirk D.L., Schmitt R.;

"Volvox germline-specific genes that are putative targets of RegA
repression encode chloroplast proteins.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-OCT-2000
01-OCT-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Volvox carteri f. nagariensis.
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Virology 216:235-237(1996).
EMBL; S81657; AAB36373.2; -
SEQUENCE 113 AA; 13641 M
                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NCBI_TaxID=10447;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HSSP; P07237; 1MEK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EQUENCE FROM N.A.
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AF110784; AAD55566.1;
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    13641 MW;
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RNA stage; Baculoviridae;
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Last sequence update)
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Pred. No. 23;
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    F68B548415F229A9 CRC64
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annotation update)
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                                           Bowman S., Lawson D., Basham D., Brown D., Chillingworth T., Churcher C.M., Craig A., Davies R.M., Devlin K., Feltwell T., Gentles S., Gwilliam R., Hamlin N., Harris D., Holroyd S., Hornsby Horrocks P., Jagels K., Jassal B., Kyes S., McLean J., Moule S., Mungall K., Murphy L., Oliver K., Quail M.A., Rajandream M.-A., Mungall K., Skelton J., Squares R., Squares S., Sulston J.B., Whitehead S., Woodward J.R., Newbold C., Barrell B.G.; "The complete nucleotide sequence of chromosome 3 of Plasmodium falciparum.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDILINE-98449861; PubMed=9774588;
Chandler L.J., Borucki M.K., Dobie D.K., Wasielosl Thompson W.H., Gundersen C.B., Case K., Beaty B.J. "Characterization of La Crosse virus RNA in autops
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Viruses; ssRNA negative-strand viruses; Bunyaviridae; Orthobunyavirus.
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InterPro; IFR001784; Bunya_nucleocap.
Pfam; PF00952; Bunya_nucleocap; 1.
ProDom; PD001909; Bunya_nucleocap; 1.
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                                                                                                                                                                                                                                     MEDLINE=99376085;
                                                                                                                                                                                                                                                                                                                           Plasmodium falciparum
Eukaryota; Alveolata;
                                                                                                                                                                                                                                                                                                                                                                        MAL3P2.2
                                                                                                                                                                                                                                                                                                                                                                                           Hypothetical
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                      400:532-538(1999)
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222 AA;
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(TrEMBLrel. 05, Last sequence up
(TrEMBLrel. 19, Last annotation
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(TrEMBLrel. 23,
(TrEMBLrel. 23,
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; 25045 MW;
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Apicomplexa; H
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RA Hall N., Pain A., Berriman M., Churcher C., Harris B., Harris D.,
RA Mungall K., Bowman S., Atkin R., Baker S., Barron A., Brooks K.,
RA Buckee C.O., Burrows C., Cherevach I., Chillingworth C.,
RA Chillingworth T., Christodoulou Z., Clark L., Clark R., Corton C.,
RA Cronin A., Davies R., Davis P., Dear P., Dearden P., Doggett J.,
RA Cronin A., Davies R., Davis P., Dear P., Hamlin N., Hance Z.,
RA Harper D., Hauser H., Hornsby T., Holroyd S., Horrocks P.,
RA Hamphray S., Jagels K., James K.D., Johnson D., Kerhornou A.,
RA Humphray S., Jagels K., James K.D., Johnson D., Kerhornou A.,
RA Knights A., Konfortov B., Kyes S., Larke N., Lawson D., Lennard N.,
RA Knights A., Konfortov B., Kyes S., Larke N., Lawson D., Lennard N.,
RA Chiles A., Conford D., Price C., Quail M.A., Rabbinowitsch B.,
RA Chiles A., Sharp S., Smith R., Squares R., Squares S., Stevens K.,
RA Segger K., Sharp S., Smith R., Squares R., Squares S., Stevens K.,
RA Taylor K., Tivey A., Unwin L., Whitehead S., Woodward J.,
RA Taylor K., Tivey A., Unwin L., Whitehead S., Woodward J.,
RA Taylor K., Tivey A., Unwin L., Whitehead S., Woodward J.,
RA Taylor K., Plasmodium falciparum chromosomes 1, 3-9 and 13.";
REMBL, AL034558; CAB38989.3; -.
RWHDOCTHORNICAL STANDARD C., Barrell B.G;
RWBL, AL034558; CAB38989.3; -.
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Q8NWJ3;
01-OCT-2002
01-OCT-2002
01-MAR-2003
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Q8SDQ4;
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SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Comparative analysis of the genomes of the temperate bacteriophages #11, #12 and #13 of Staphylococcus aureus 8325."; Submitted (SEP-2001) to the EMBL/GenBank/DDBJ databases. EMBL; AF424782; AAL82307.1; -. InterPro; IPR000330; SNF2_N.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Jia H.;
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InterPro; IPR001023; HSD70.
Pfam; pP00012; HSD70.
Pfam; pP00012; HSD70; 1.
PROSITE; PR003016; HBD70; 1.
PROSITE; PS00014; ER TARGET; 1.
PROSITE; PS000297; HSD70 1; 1.
PROSITE; PS000329; HSD70 2; 1.
PROSITE; PS01036; HSD70 3; 1.
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01-OCT-2000
01-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "The membrane-bound DnaJ protein located at the cytosolic site of glyoxysomes specifically binds the cytosolic isoform 1 of Hsp70 but not other Hsp70 species";
Eur. J. Biochem. 267:746-754 (2000).
-I- FUNCTION: PROBABLY PLAYS A ROLE IN FACILITATING THE ASSEMBLY OF MULTIMERIC PROTEIN COMPLEXES INSIDE THE ER (BY SIMILARITY).
-I- SUBCELLULAR LOCATION: ENNOPLASMIC REFICULM LUMEN (BY SIMILARITY).
-I- SIMILARITY: BELONGS TO THE HEAT SHOCK PROTEIN 70 FAMILY.
EMBL; AJ249329; CLAP72128.1;
-- EMBL; AJ249329; CLAP72128.1;
-- EMBL; AJ249329; CLAP72128.1;
-- EMBL; AJ249329; CLAP72128.1;
-- EMBL; AJ249329; CLAP72128.1;
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Baba T., Takeuchi F., Kuroda M., Yuzawa H., Aoki K.-I., Oguchi A.,
Nagai Y., Tawama N., Asano K., Naimi T., Kuroda H., Cui L.,
Yamamoto K., Hiramatsu K.;
"Genome and virulence determinants of high virulence community-
acquired MESA.";
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EMBL; AP004827; BAB95270.1; -.

Interpro; IPR00330; SNF2_N.

Pfam; PF00176; SNF2_N; 1.

Hypothetical protein; Complete proteome.

SEQUENCE 452 AA; 52770 MW; C5ED88ADF4BFD192
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Cucumis sativus (Cucumber).
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nilarity 41.2%;
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Bacillales; Staphylococcus
                                                                                                                                                                                                                                    reticulum
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Pred. No. 40;
4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Last sequence update)
Last annotation updat
                                                                                         Score 48; DB Pred. No. 60; 5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Created)
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                                                                                                                                                                                                       0A430B71804D6186 CRC64;
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                                                                                                                                             Length 665;
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RESULT 14
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InterPro; IPR001023; Hsp70.

Pfam; PF00012; HSP70; 1.

PRINTS; PR00301; HEATSHOCK70.

ProDom; PD000089; Hsp70; 1.

PROSITE; PS000014; ER TARGET; 1.

PROSITE; PS000297; HSP70_1; 1.

PROSITE; PS000297; HSP70_2; 1.

PROSITE; PS000297; HSP70_3; 1.

PROSITE; PS01036; HSP70_3; 1.

PROSITE; PS01036; HSP70_3; 1.
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ATP-binding; End
ATP-binding; End
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Q9FSY7;
01-MAR-2001
01-MAR-2001
                       Glaser P., Prangeul L., Buchrieser C., Rusniok C., Amend A., Baquero F., Berche P., Bloecker H., Brandt P., Chakraborty T., Chave E., de Daruvar A., Dehoux P., Domann B., Chetcuani F., Couve E., de Daruvar A., Dehoux P., Domann B., Dominguez-Bernal G., Duchaud B., Durant L., Dussur Entian K.-D., Psihi H., Garcia-del Portillo F., Garrido P., Jack
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Rosideurosids I; Fagales; Betulaceae; Corylus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-MAR-2001 (TrEMBLrel. 16, Created)
01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
Putative luminal binding protein.
                                                                                                                                                                                                                                                                 PubMed=11679669;
                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
STRAIN=CLIP 11262
                                                                                                                                                                                                                                                                                                                                                                                                                                          NCBI_TaxID=1642;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Listeria innocua.
Plasmid pLI100.
Bacteria; Firmicu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL; AJ295617; CAC14168.1; -. HSSP; P19120; 3HSC.
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-!- SIMILARITY: BELONGS TO THE HEAT SHOCK PROTEIN 70 FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Firmicutes;
    Goebel
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bacillales; Listeriaceae; Listeria
Gomez-Lopez N., Hain
                                                                                                                                                     Buchrieser C., Rusniok C., Amena A.

Rrandt P., Chakraborty
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        624
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Hauf J.,
                                                                                                                                                                   Amend A.,
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                                                                          Dussurget
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Best Local S
Matches 7
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Matches
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Q93R01;
Q93R01;
O1-DEC-2001 (TrEMBLrel. 19, C:
O1-DEC-2001 (TrEMBLrel. 19, L:
O1-MAR-2003 (TrEMBLrel. 23, L:
Endonuclease and methylase Ll:
Lactococcus lactis.
                                                                                                                                                                                        PRINTS; PRO0507; NIZNEMTFRASE.

SMART; SM00487; DEXDC; 1.

SMART; SM00490; HELICC; 1.

PROSITE; PS00092; N6_MTASB; 1.

ATP-binding; Helicase; Hydrolase; Methyltransferase; Plasmid.

SEQUENCE 1570 AA; 179353 MW; 141904BFC672793C CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Vazquez-Boland J.-A., Voss H., Wehland J., C "Comparative genomics of Listeria species.", Science 294:849-852 (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                 W10 consists of only one single polypeptide."; FEMS Microbiol. Lett. 200:91-96 (2001). EMBL; AF097471; AAK71920.1; -. InterPro; IPR001410; DEAD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                InterPro; IPR001410; DEAD.
InterPro; IPR001650; Helicase C.
InterPro; IPR002296; N12N6 mtfrase.
InterPro; IPR002296; N12N6 mtfrase.
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                                                                                                                                                                                                                                                                                                                                                    InterPro; IPR001650; Hellcase C. InterPro; IPR002296; N12NG mtfrase. InterPro; IPR002052; N6 Mtase. Pfam; PF00271; helicase_C; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Madsen A., Josephsen J.; "The LlaGI restriction and modification system of Lactococcus lactis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Plasmid pEW104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Plasmid; Hypothetical SEQUENCE 1569 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SMART; SM00490; HELICC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE=21303253; PubMed=11410355;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NCBI_TaxID=1358;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRINTS; PR00507; N12N6MTFRASE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL; AL592102; CAC42019.1; -.
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RPAIEWIIDQYQVKTDKK
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                                                                                                    Conservative
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larity 38.9%;
Conservative
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                                                                                                                      48.5%;
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178613 MW
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  , Last sequence update)
, Last annotation update)
LlaGI.
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                                                                                                 Score 48; DB
Pred. No. 1.5e
6; Mismatches
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Pred. No. 1.5e+02;
6; Mismatches 5;
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1.5e+02;
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                                                                                                                                                 Length 1570;
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Search completed: January Job time: 9.2 secs

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Result
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Listing first 45 summaries
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Maximum DB seq length: 200000000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Run on:
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Match
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1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*

2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*

3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*

4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*

5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*

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    KDSLQWITDQYNKESDDK 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Copyright
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             US-09-431-480-4
US-09-617-302-4
US-09-617-302-4
US-09-617-532R-4481
US-08-785-427-2
US-08-785-427-2
US-09-632-538C-36
US-09-617-302-3
US-09-617-302-3
US-09-617-302-3
US-09-308-375-2
US-09-308-375-2
US-09-308-375-2
US-09-252-991R-25303
US-09-252-991R-25303
US-08-656-965-2
US-08-466-953R-53
US-08-466-953R-53
US-08-464-035R-5
US-09-464-035R-5
US-09-328-352-6825
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US-09-104-324B-4
US-09-104-324B-4
US-09-1134-001C-3183
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Sequence 36, Appli
Sequence 3, Appli
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Sequence 7763, Ap
Sequence 25303, A
Sequence 25303, A
Sequence 25303, A
Sequence 45, Appli
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Sequence 186, Appli
Sequence 3, Appli
Sequence 6825, Ap
Sequence 6825, Ap
Sequence 6825, Ap
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ALIGNMENTS

RESULT 2 US-09-617-302-4 Sequence 4, Application US/096173 Sequence 4, Application US/096173 Patent No. 6245529 GENERAL INFORMATION: APPLICANT: Holloway, James L. APPLICANT: Feldhaus, Andrew TITLE OF INVENTION: TESTIS SPEC FILE REFERENCE: 98-72 C1 CURRENT APPLICATION NUMBER: US/0 CURRENT FILING DATE: 2000-07-17 PRIOR APPLICATION NUMBER: 09/13 PRIOR FILING DATE: 1999-11-20 PRIOR APPLICATION NUMBER: 60/10 PRIOR APPLICATION NUMBER: 60/10 PRIOR FILING DATE: 1999-11-20 PRIOR FILING DATE: 1999-09-28 J NUMBER OF SEQ ID NOS: 22	Qy 1 KDSLQWI 	Query Match Best Local Similarity Matches 9; Conser	RESULT 1 US-09-431-480-4 ; Sequence 4, Application US/0; Patent No. 6235708 ; PILE REFERENCE: 98-72 ; CURRENT FILING DATE: 199-11; PARLIER APPLICATION NUMBER: 199-11; PARLIER FILING DATE: 199-11; PARLIER FILING DATE: 1998-11; PARLIER FILING DATE: 1998-11; PARLIER FILING DATE: 1999-0; NUMBER: PARLIER FILING DATE: 1991-0; NUMBER: 1991-0; NUM
Application US/09617302 Application US/09617302 FAMATION: HOLLOWBY, James L. Peldhaus, Andrew Peldhaus, Andrew Peldhaus, Andrew INCE: 98-72 C1 INCE: 199-71 CATION NUMBER: US/09/617,302 ING DATE: 1999-11-01 ICATION NUMBER: 60/109,217 ICATION NUMBER: 60/109,217 ICATION NUMBER: 60/156,382	KDSLQWITDQYNKESDDK 18 	47.5%; Score 47; DB 3; larity 50.0%; Pred. No. 4.5; Conservative 3; Mismatches	80-4 4, Application US/09431480 1, 6235708 1, FORMATION: TT: Hollowsy, James L. TT: Feldhaus, Andrew INVENTION: TESTIS SPECIFIC CYSTATIN-LIKE PERENCE: 98-72 FILING DATE: 1999-11-01 APPLICATION NUMBER: 60/109,217 FILING DATE: 1999-11-20 APPLICATION NUMBER: 60/156,382 FILING DATE: 1999-09-28 FIL
LIKE PROTEIN CYSTATIN T		; Length 142; 6; Indels 0; Gaps	IKB PROTBIN CYSTATIN T

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; ORGANISM: Homo sapiens
US-09-617-302-4
                                                                                                               US-09-107-532A-4481
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Best Local Similarity 50.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 4481, Application US/09107532A
Patent No. 6583275
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Lynn A Doucette-Stamm
TITLE OF INVENTION: NUCLEIC ACID
ENTEROCOCCUS
                                                  Matches
                                                                            Query Match
                                                                                                                                                                                                                                                                                                                              INFORMATION FOR SEQ ID NO: 4481:
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                                                                Local
                                                                                                                           NAME/KEY: misc_feature
LOCATION: (B) LOCATION 1...264
SEQUENCE DESCRIPTION: SEQ ID NO: 4481:
                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
LENGTH: 264 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                           NAME: Ariniello, Pamela Deneke
REGISTRATION NUMBER: 40,489
REFERENCE/DOCKET NUMBER: GTC-012
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                             TOPOLOGY: linear MOLECULE TYPE: protein HYPOTHETICAL: YES
                                                                                                                                                                              FEATURE:
                                                                                                                                                                                                                ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION DATA:
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MEDIUM TYPE: CD/ROM ISO9660
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                                                 Similarity 7; Conser
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KDSLQWITDQYNKESDDK 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/085,598 FILING DATE: 14 May 1998 APPLICATION NUMBER: 60/051571 FILING DATE: July 2, 1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/09/107,532A FILING DATE: 30-Jun-1998 APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: Waltham
STATE: Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: ASC:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OPERATING SYSTEM: <Unknown>
                                                                                                                                                                                               ORGANISM: Enterococcus faecium
                                                                                                                                                                                                                                                                                                                                             TELEPHONE: (781)893-50
TELEFAX: (781)893-8277
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38.9%;
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                                                              Score 47;
Pred. No.
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Pred. No.
                                               Mismatches
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AND AMINO ACID SEQUENCES RELATING TO
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US-08-913-578-2
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                                                                                         GENERAL INFORMATION:
APPLICANT: Hodgson, John
APPLICANT: Lawlor, Elizabeth
TITLE OF INVENTION: No. 623890
NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                           Sequence 2, Applica
Patent No. 6238900
                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                           Query Match
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Patent No. 6218159
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APPLICANT: Hodgsc
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SEQUENCE CHARACTERISTICS:
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ZIP: 19406-0939
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
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SOFTWARE: FABTSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER: 9601
FILING DATE: 19-JAN-1996
ATTORNEY/AGENT INFORMATION:
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                         STRIE: SmithKline Beecham Corporation STREET: 709 Swedeland Road CITY: King of Prussia STATE: PA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: Gimmi, Edward R
REGISTRATION NUMBER: 38,891
REFERENCE/DOCKET NUMBER: P3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/0
FILING DATE: 17-JAN-1997
COUNTRY: USA
ZIP: 19406-0939
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King of Prussia
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09 Swedeland Road
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                                                                                                               No. 6238900el tRNA synthetase
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COMPUTER READABLE FORM: MEDIUM TYPE: Diskett

Diskette

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Patent No. 6162618
GENERAL INFORMATION:
APPLICANT: Warren, Richard L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
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APPLICATION UMBER: US/08/785,427
FILING DATE: 17-JAN-1997
CLASSIFICATION DATA:
APPLICATION: 435
PRIOR APPLICATION DATA:
APPLICATION UMBER: 9601069.9
FILING DATE: 19-JAN-1996
ATTORNEY/AGENT INFORMATION:
NAME: Gimmi, Edward R
REGISTRATION NUMBER: 38,891
REFERENCE/DOCKST NUMBER: 38,891
REFERENCE/DOCKST NUMBER: 931352
TELECOMMUNICATION INFORMATION:
TELEPHONE: 610-270-4478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
ATTORNEY AGENT INFORMATION:
NAME: Falk, Stephen T
REGISTRATION NUMBER: 36,795
REFERENCE/DOCKET NUMBER: GM10
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-994-2488
                                                                                                                                                                             COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows 95
SOFTWARE: FastSEQ for Windows Version 2.0b
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/058,692
FILING DATE:
                                                                                                                        CLASSIFICATION:
PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                            STREET: 4000 Bell / CITY: Philadelphia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Match 46.5%;
Local Similarity 43.8%;
Les 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: amino acid
                                                                                                         FILING DATE:
                                                                                                                                                                                                                                                                                                                           ZIP: 19103-2793
                                                                                                                                                                                                                                                                                                                                            COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM CONTROL OPERATING SYSTEM:
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                                                                                                                                                                                                                                                                                                                                                                 PA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               484 amino acids
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                                   GM10140
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Pred. No. 25;
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Best Local Similarity
Arches 8; Conserva
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US-09-584-628-2
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                                                             Matches
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Patent No. 6309866
                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                   INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS: LENGTH: 474 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                               ATTORNEY/AGENT INFORMATION:
NAME: Falk, Stephen T
REGISTRATION NUMBER: 36,795
REFERENCE/DOCKET NUMBER: GM10
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215.994-2488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 19103-2793
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS: A
ADDRESSES: Dechert, Price & Rhoads
ADDRESSES: Dechert, Price & Rhoads
STREET: 4000 Bell Atlantic Tower, 1717 Arch Stre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Warren, Richard L.
TITLE OF INVENTION: 6-phospho
TITLE OF INVENTION: ogenase
                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows 95
SOUTWARE: FastSEQ for Windows Version 2.0b
CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: amino acid
STRANDEDNESS: sin
TOPOLOGY: linear
                                                                                                                                                    TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/09/584,628 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION:
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375
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                             4 LOWITDOYNKESD 16
 LQKITDAYNRDAD 387
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                                                             Conservative
                                                                                                                                        linear
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61.5%;
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                                                                                                                                                                                                                                                                                                 GM10140
                                                                          Score 44; DB 4;
Pred. No. 50;
                                                               Mismatches
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                                                                                         Length 474;
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RESULT 8 US-09-632-538C-36

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APPLICANT: Misra, Santosh et al.
TITLE OF INVENTION: PLANT PROMOTER DERIVED FROM LUMINAL BINDING PROTEIN GENE AND METH
TITLE OF INVENTION: ITS USE
FILE REPERENCE: 54359
CURRENT APPLICATION NUMBER: US/09/632,538C
CURRENT FILING DATE: 2000-08-04
NUMBER OF SEQ ID NOS: 37
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 36
LENGTH: 655
TYPE: PRT
ORGANISM: Pseudotsuga menziesii
US-09-632-538C-36
                                                                                                                                                                                                                                       US-09-617-302-3
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US-09-431-480-3
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CURRENT FILING DATE: 1999-11-01
EARLIER APPLICATION NUMBER: 60/109,217
EARLIER FILING DATE: 1998-11-20
EARLIER APPLICATION NUMBER: 60/156,382
EARLIER FILING DATE: 1999-09-28
NUMBER OF SEQ 1D NOS: 22
SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                             Sequence 3, Application US/09617302
Patent No. 6245529
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO 3
LENGTH: 142
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Best Local 9
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                               APPLICANT: Holloway, James L.
APPLICANT: Peldhaus, Andrew
TITLE OP INTENTION: TESTIS SPECIFIC CYSTATIN-LIKE PROTEIN CYSTATIN T
FILE REFERENCE: 98-72 C1
CURRENT APPLICATION NUMBER: US/09/617,302
CURRENT FILING DATE: 2000-07-17
PRIOR APPLICATION NUMBER: 09/431,480
PRIOR FILING DATE: 1999-11-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: HOlloway, James L.
APPLICANT: Feldhaus, Andrew
TITLE OF INVENTION: TESTIS SPECIFIC CYSTATIN-LIKE PROTEIN CYSTATIN T
FILE REFERENCE: 98-72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local
APPLICATION NUMBER: FILING DATE: 1998-
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8; Conserv
                                                                                                                                                                                                                                                                                                                                       KDSLQWITDQYNXESDDK 18
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                                                                                                                                                                                                                                                                                                                                                                                43.4%;
nilarity 44.4%;
Conservative
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larity 35.3%;
Conservative
                              1999-11-01
                60/109,217
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                    Score 43; DB
Pred. No. 19;
4; Mismatches
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19;
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US-09-328-352-7763
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Best Local Similarity
Matches 8; Conserve
                         á
                                                                                                                            ; TYPE: PRT; ORGANISM: Bacillius subtilis US-09-308-375-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; ORGANISM: Acinetobacter baumannii
US-09-328-352-7763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; LENGTH: 142
; TYPE: PRT
; ORGANISM: Mus musculus
US-09-617-302-3
                                                                                                                                                                                                                                                                                                                                                                                                      US-09-308-375-2
                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 12
                                                            Query Match
Best Local S
Matches 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/09/328,352
CURRENT FILING DATE: 1999-06-04
NUMBER OF SEQ ID NOS: 8252
SEQ ID NO 7763
LENGTH: 2188
TYPE: PRT
                                                                                                                                                                        SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 2
LENGTH: 2285
                                                                                                                                                                                                                                                                                                                                                   Sequence 2, Application US/09308375
Patent No. 6300117
GENERAL INFORMATION:
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Matches
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SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
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Patent No. 6562958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                      TITLE OF INVENTION: Proteases From Gram-Positive Organisms FILE REFERENCE: GC394-PCT CURRENT APPLICATION NUMBER: US/09/308,375 CURRENT FILING DATE: 1999-05-14 EARLIER APPLICATION NUMBER: EP9719636.4 EARLIER FILING DATE: 1997-09-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1999-(NUMBER OF SEQ ID NOS: 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: GATY L. Breton et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTER
TITLE OF INVENTION: BAUMANNII FOR DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILE REFERENCE: GTC99-03PA
                                                                                                                                                                                                                            NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                         APPLICANT: Genencor International, Inc.
                                                         Local Similarity
nes 9; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local
1995 QDSIQKLTDQINQYSLD 2011
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8; Conser
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                            KOSLOWITDOYNKESDD
                                                            43.4%;
nilarity 52.9%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     43.4%; Score 43; DB 4; Larity 50.0%; Pred. No. 3.9e+02; Conservative 3; Mismatches 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Application US/09328352
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Pred. No.
                                                                               Score 43; DB 4;
Pred. No. 4.1e+02;
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                                                                 Mismatches
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APPLICATION NUMBER: US/08,
FILING DATE:
CLASSIFICATION: 800
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 222 amino acids
TYPE: amino acid
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-556-965-2
RESULT 15
5472691-3
;PATENT NO. 5472691
APPLICANT: MARKLUND, STEFAN; EDLUND, THOMAS;
TITLE OF INVENTION: SUPEROXIDE DISMUTASE;
NUMBER OF SEQUENCES: 7
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US-08-556-965-2
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TITLE OF INVENTION: NUCLEIC ACID AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPRUTICS
FILE REFERENCE: 107196.136
CURRENT APPLICATION NUMBER: US/09/252,991A
CURRENT FILING DATE: 1999-02-18
PRIOR FILING DATE: 1999-02-18
PRIOR PAPLICATION NUMBER: US 60/074,788
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR FILING DATE: 1998-02-18
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEQ ID NO 25303
LENGTH: 708
TYPE: PRT
ORGANISM: Pseudomonas aeruginosa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 25303, Application US/09252991A Patent No. 6551795
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                 Query Match 42.4%;
Best Local Similarity 46.7%;
Matches 7; Conservative
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Patent No. 6025540
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Best Local Similarity
Matches 9; Conserva
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: Production of EC-SOD

NUMBER OF SEQUENCES: 31

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25 (EPO)

CURRENT APPLICATION DATA:

CURRENT APPLICATION DATA:
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Pred. No. 44;
3; Mismatches
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Search completed: January 21, 2004, 12:09:58 Job time: 4.36774 secs
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Best Local :
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APPLICATION NUMBER: US/08/12
PILING DATE: 24-SP-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 897,624
PILING DATE: 12-JUN-1992
APPLICATION NUMBER: 576,114
PILING DATE: 27-aug-1990
APPLICATION NUMBER: 902,596
PILING DATE: 02-sep-1986
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Similarity 46.7%;
7; Conservative
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DSAEWIRDMYAKVTE 26
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Perfect score:
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          Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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Gapop 10.0 , Gapext 0.5
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QY 12 NKESDD 17 Db 3 NKGSDD 8	ility inhibitor protein - pig (fra Sus scrofa domestica (domestic ç 4-Feb-1997 #sequence_revision 13-N on: S66235 , T.; Hiroaki, H.; Furuichi, Y.; W , 368, 420-424, 1995 Cloning of boar SPMI gene which is ce number: S66233; MUID:95361914; on: S66235 preliminary e type: protein s: 1-13 < IWA> ro-6 was also found cal Similarity 83.3%; Score 25; cal Similarity 83.3%; Pred. No.	Query Match 25.8%; Score 25.5; DB 2; Best Local Similarity 46.2%; Pred. No. 8e+02; Matches 6; Conservative 2; Mismatches 2; Qy 6 WITDQYNKESDDK 18	RESULT 1 S68095 Calcium-binding protein, 23K - Orchestia cavimana (fra C;Species: Orchestia cavimana C;Date: 21-Apr-1997 #sequence_revision 21-Apr-1997 #te C;Accession: S68095 R;Luquet, G.; Testeniere, O.; Graf, F. Biochim. Biophys. Acta 1293, 272-276, 1996 A;Title: Characterization and N-terminal sequencing of A;Reference number: S68095; MUID:96202045; PMID:862004 A;Accession: S68095 A;Molecule type: protein A;Residues: 1-14 <luq- binding<="" c;keywords:="" calcium="" td=""><td>ALIGNMENTS</td><td>30 20 20.2 17 2 A60570 31 19.5 19.7 17 2 S51736 32 19 19.2 8 2 A61328 33 19 19.2 10 2 PT0213 34 19 19.2 11 2 PH0904 35 19 19.2 12 2 PT0274 36 19 19.2 12 2 PT0274 37 19 19.2 14 2 A28018 38 19 19.2 14 2 S66234 39 19 19.2 14 2 S66234 40 19 19.2 17 2 A29834 41 19 19.2 17 2 A29834 41 19 19.2 17 2 B28027 42 19 19.2 18 2 S29491 43 19 19.2 18 2 S29491 44 18 18.2 6 2 PT0576</td></luq->	ALIGNMENTS	30 20 20.2 17 2 A60570 31 19.5 19.7 17 2 S51736 32 19 19.2 8 2 A61328 33 19 19.2 10 2 PT0213 34 19 19.2 11 2 PH0904 35 19 19.2 12 2 PT0274 36 19 19.2 12 2 PT0274 37 19 19.2 14 2 A28018 38 19 19.2 14 2 S66234 39 19 19.2 14 2 S66234 40 19 19.2 17 2 A29834 41 19 19.2 17 2 A29834 41 19 19.2 17 2 B28027 42 19 19.2 18 2 S29491 43 19 19.2 18 2 S29491 44 18 18.2 6 2 PT0576
мівшасспев	(fragment) ic pig) 13-Mar-1997 #text_change 13-Mar-1997 13-Mar-1997 #text_change 13-Mar-1997 13-Mar-1997 #text_change 13-Mar-1997 14; wada, K.; Satoh, M.; Satoh, M.; Osa th is expressed specifically in seminal 14; pMID:7635190 14; pMID:7635190 15. Length 13; No. 8.8e+02; t-fold Company 16. Company 17. Company 18. Com	Score 25.5; DB 2; Pred. No. 8e+02; 2; Mismatches 2	Orchestia cavimana (fragment) revision 21-Apr-1997 #text_change 29-Aug-1997 Graf, F. Graf, F. 192-276, 1996 N-terminal sequencing of a calcium binding protein from th ID:96202045; PMID:8620040	ALIGNMENTS	

RESULT 3
A60156
cellulase (EC 3.2.1.4) - Clostridium josui (fragment)

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T-cell receptor delta chain V region (105.7) - mouse (fragment)
C;Species: Mus musculus (house mouse)
C;Date: 31-Aug-1990 #sequence_revision 31-Aug-1990 #text_change 30-May-1997
C;Accession: G35141
R;Sim, G.K.; Augustin, A.
Cell 61, 397-405, 1990
A;Title: Dominantly inherited expression of BID, an invariant undiversified T cell
A,Reference number: A35141; MUID:90242386; PMID:2110506
A;Accession: G35141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R;Fujino, T.; Sasaki, T.; Ohmiya, K.; Shimizu, S.
Appl. Environ. Microbiol. 56, 1175-1178, 1990
A;Title: Purification and properties of an endo-1,4-beta-glucanase translated A;Reference number: A60156; MUID:90253158; PMID:2187404
A;Accession: A60156
                                                                                                                                                                                                                                                                                                                                                                                                             RESULT
G35141
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A;Description: T cell receptor repertoire for a viral epitope in humans is diversified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Molecule type: protein A; Residues: 1-15 < FUJ > C; Function:
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C;Species: Clostridium josui
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A; Residues: 1-15 < BUR >
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C; Accession: A60156
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                                                                                                                                                               ;Molecule type: mRNA
;Residues: 1-15 <SIM>
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Keywords:
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                                                                                                                                          T-cell receptor
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Pred. No. 2.1e
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le+03;
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2.1e+03;
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                                 A; Status: preliminary
A; Molecule type: DNA
A; Residues: 1-17 <STO>
                                                                                                                                                             C;Accession: C85956
R;Perna, N.T.; Plunkett III, G.; Burland, V.; Mau, B.; Glasner, J.D.; Rose, Iller, L.; Grotbeck, B.J.; Davis, N.W.; Lim, A.; Dimalanta, E.; Potamousis, Nature 409, 529-533, 2001
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                                                                                               A; Accession: C85956
                                                                                                                      A;Title: Genome sequence of enterohemorrhagic Escherichia coli O157:H7
A;Reference number: A85480; MUID:21074935; PMID:11206551
Cross-references: GB:AE005174; NID:g12517535; PIDN:AAG58111.1; Experimental source: strain O157:H7, substrain EDL933
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RESULT 8
hypothetical protein Z4327 [imported] - Escherichia coli (strain O157:H7, substrain C;Species: Escherichia coli C;Species: 16-Feb-2001 #sequence_revision 16-Feb-2001 #text_change 14-Sep-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             N;Alternate names: glycoprotein 87
C;Species: Nicotiana alata (Persian tobacco)
C;Date: 16-Sep-1992 #sequence_revision 16-Sep-1992 #text_change 13-Mar-1997
C;Accession: PQ0175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R;Rocher, A.; Soriano, F.; Molina, E.; Gonzalez-Limas, G.; N
Biochim. Biophys. Acta 1247, 143-148, 1995
A;Title: Characterization of distinct alpha- and gamma-type
A;Reference number: S52124; MUID:95178530; PMID:7873584
A;Accession: S52125
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                                                                                                                                                                                                                                                                                                              C; Superfamily: Enterobact C; Keywords: glycoprotein
                                                                                                                                                                                                                                                                                                                                      A; Experimental source: style
C; Comment: This protein is involved in self-incompatibility
C; Superfamily: Enterobacter ribonuclease
                                                                                                                                                                                                                                                                                                                                                                                                                              A;Reference number: PQ0173; MUID:92404717; PMID:2535548
A;Recession: PQ0175
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R;Jahnen, W.; Batterham,
Plant Cell 1, 493-499, 1
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A;Molecule type: protein
A;Residues: 1-18 <ROC>
C;Superfamily: gliadin
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Pred. No. 2.6e+03;
Pred. No. 2.6e+03;
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GSPDB:GN00145;

UWGP: Z432

Mayhew,

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endo-1,3-beta-glucanase (EC 3.2.1.-), 40k - Bacillus circulans (strain WL-12) (;Species: Bacillus circulans C;Species: Bacillus circulans C;Date: 14-May-193 #sequence_revision 14-May-1993 #text_change 07-May-1999 C;Accession: B60763 R;Fiske, M.J.; Tobey-Fincher, K.L.; Fuchs, R.L. J. Gen. Microbiol. 136, 2377-2383, 1990 A;Title: Cloning of two genes from Bacillus circulans WL-12 which encode 1,3-ba;Reference number: A60763; MUID:91178514; PMID:2127800
                                                                                                                                                                                                                                                                                                                                                                                                A;Molecule type: protein
A;Residues: 1-18 <OHK>
A;Residues: 1-18 <OHK>
A;Experimental source: seminal plasma
C;Comment: This enzyme is a serine peptidase that preferentially liberates Xaa-proline
C;Keywords: dipeptidylpeptide hydrolase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        dipeptidyl-peptidase IV (EC 3.4.14.5) - pig (fragment)
C;Species: Sus scrofa domestica (domestic pig)
C;Date: 22-Apr-1995 #sequence_revision 26-May-1995 #text_change 07-May-1999
C;Accession: PX0081
R;Ohkubo, I.; Huang, K.; Ochiai, Y.; Takagaki, M.; Kani, K.
J. Biochem. 116, 1182-1186, 1994
A;Title: Dipeptidyl peptidase IV from porcine seminal plasma: Purification, A;Reference number: PX0081; MUID:95204396; PMID:7896751
A;Accession: PX0081
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A;Molecule type: protein
A;Residues: 1-18 <CAL>
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A;Gene: Z4327
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Pred. No. 3.4e+03;
3; Mismatches 1
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Pred. No. 3.6e+03;
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    RESULT 14
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hypothetical protein BH1490 [imported]
C;Species: Bacillus halodurans
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gonadoliberin - sea lamprey

(N,Alternate names: gonadotropin releasing hormone (GnRH)

(Species: Petromyzon marinus (sea lamprey)

(Date: 17-Mar-1987 #sequence_revision 17-Mar-1987 #text_change 18-Mar-1997

(C,Accession: A01412

R,Sherwood, N.M.; Sower, S.A.; Marshak, D.R.; Fraser, B.A.; Brownstein, M.J.

J. Biol. Chem. 261, 4812-4819, 1986

A,Title: Primary structure of gonadotropin-releasing hormone from lamprey brain.

A,Reference number: A01412; MUID:86168192; PMID:3514603

A,Accession: A01412
                                                                                                                                                                                               Gene 121, 337-342, 1992
A;Title: Homeoboxes in flatworms.
A;Reference number: JC1386; MUID:93077050; PMID:1359988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Molecule type: protein
A;Residues: 1-10 <SHES
C;Comment: This hormone was isolated from the brain.
C;Superfamily: gonadoliberin
C;Keywords: amidated carboxyl end; hormone; pyroglutamic acid
F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
F;10/Modified site: amidated carboxyl end (Gly) #status experimental
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A;Residues: 1-15 <FIS>
C;Comment: This bacillus produces up to six different 1,3-beta-glucanases
C;Keywords: glycosidase; hydrolase
                                                                                                             A;Cross-references: EMBL:X66821
C;Keywords: homeobox
                                                                                                                                                     A; Molecule type: DNA
A; Residues: 1-14 <OLI>
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Pred. No. 2.7e
1; Mismatches
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Pred. No. 3.5e+03;
                                                       Score 21; DB 2;
Pred. No. 3.9e+03;
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                                                                           Length 14;
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Bacillus

halodurans (strain C-125)

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C;Date: 01-Dec-2000 #sequence_revision 01-Dec-2000 #text_change 15-Jun-2001 C;Accession: B83836 R;Takami, H; Nakasone, K.; Takaki, Y.; Maeno, G.; Sasaki, R.; Masui, N.; Fuji, F.; Hira Nucleic Acids Res. 28, 4317-4331, 2000 Nucleic Acids Res. 28, 4317-4331, 2000 A;Title: Complete genome sequence of the alkaliphilic bacterium Bacillus halodurans and A;Reference number: A83650; MUID:20512582; PMID:11058132 A;Accession: B83836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C;Accession: S21238
R;Pierik, A.J.; Duyvis, M.G.; van Helvoort, J.M.L.M.; Wolbert, R.B.G.; Hagen, W.R. Eur. J. Biochem. 205, 111-115, 1992
A;Title: The third subunit of desulfoviridin-type dissimilatory sulfite reductases.
A;Reference number: S21197; MUID:92209491; PMID:1555572
A;Accession: S21238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 15
S21238
                                                                                                                                                                                                                                                                                                                   A;Description: catalyzes the six-electron reduction of sulfite to sulfide A;Pathway: the terminal oxidase in the sulfate-reduction pathway C;Keywords: heterohexamer; oxidoreductase
                                                                                                                                                                                                                                                                                                                                                                                                                   C;Genetics:
A;Gene: dsvB
C;Complex: heterohexamer; two alpha, two beta and two gamma chains
Search completed: January 21, 2004, 12:20:17 Job time : 22 secs
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C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-14 <STO>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Molecule type: protein A; Residues: 1-15 < PIE>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          hydrogensulfite reductase (EC 1.8.99.3) beta chain - Desulfovibrio vulgaris (fragment)
N.Alternate names: bisulfite reductase; desulfofuscidin; desulforubidin; desulfoviridin;
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;Date: 19-Mar-1997 #sequence_revision 11-Jun-1999 #text_change 11-Jun-1999;Accession: S21238
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Best Local
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Best Local Similarity 42.9%;
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Pred. No. 4.2e+03;
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Maximum Match 100%
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/cgn2_6/ptodata/2/pubpaa/US09B_PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/US09E_PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/US09C_PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/US10A_PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/US10B_PUBCOMB.pep:*
/cgn2_6/ptodata/2/pubpaa/US10C_PUBCOMB.pep:*
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Sequence 7, Appli
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Sequence 3, Appli
Sequence 34822, A
Sequence 48936, A
Sequence 4, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 13, Appl
Sequence 15, Appl
Sequence 15, Appl
Sequence 12456, A
Sequence 12456, A
Sequence 10941, A
Sequence 13425, A
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Sequence 13298, A		22270,	5512,	114,		114,	e 214,	214, Ap	Sequence 8129, Ap	13947,	6499,	6498,	5497,	e 420, 1	596,	e 744	4.	<u>υ</u>	ហ	ω	ω	27	æ	17	e 1941		e 36,	1094	

ALIGNMENTS

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; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-941-314-7
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US-09-941-314-7
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US-09-941-314-8
Sequence 8, Application US/09941314
Patent No. US20020142396A1
GENERAL INFORMATION:
APPLICANT: ZymoGenetics, Inc.
APPLICANT: ZYMOGenetics, Inc.
TITLE OF INVENTION: Mammalian Cystatin-8 and Its Use to
TITLE OF INVENTION: Inhibit Cancer Procoagulant Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/09/941,314
CURRENT FILING DATE: 2001-08-29
PRIOR APPLICATION NUMBER: 60/230,230
PRIOR FILING DATE: 2001-09-01
NUMBER OF SEQ ID NOS: 19
SOPTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
APPLICANT: ZymoGenetics, Inc.
TITLE OF INVENTION: Mammalian Cystatin-8 and Its Use to
TITLE OF INVENTION: Inhibit Cancer Procoagulant Proteir
FILE REFERENCE: 00-81PC
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Local Similarity 100.0%;
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Pred. No. 6.7e-08;
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US-09-941-314-8
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PRIOR FILING DATE: 2001-08-29
PRIOR FILING DATE: 2001-09-01
NUMBER OF SEQ ID NOS: 19
SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 6
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Best Local Similarity 100.
18; Conservative
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APPLICANT: ZymoGenetics, Inc.
                                                                                                                                                                                                                                                                                              Sequence 34822, Application US/09864761 Patent No. US20020048763A1
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Patent No. US20020142396A1
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Best Local Similarity
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CURRENT FILING DATE: 2001-08-29
PRIOR APPLICATION NUMBER: 60/230,230
PRIOR FILING DATE: 2001-09-01
NUMBER OF SEQ ID NOS: 19
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 8
                          PRIOR APPLICATION NUMBER: US 60/180,312
PRIOR FILING DATE: 2000-02-04
PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR FILING DATE: 2000-05-28
PRIOR APPLICATION NUMBER: US 09/632,366
                                                                                                                                               APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K.
APPLICANT: Chen, Wensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL
TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
FILE REFERENCE: Acomica-X-1
                                                                                                                                                                                                       APPLICANT: Penn, Sharron G.
APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K.
APPLICANT: Chen, Wensheng
PRIOR APPLICATION NUMBER: PRIOR FILING DATE 2000-0 PRIOR APPLICATION NUMBER:
                                                                                                                   CURRENT FILING DATE: 2001-05-23
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ORGANISM: Homo sapiens
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Pred. No. 1
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Pred. No. 1.3e-07;
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1.3e-07;
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RESULT 5
US-09-864-761-48936
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SEQ ID NO 34822
LENGTH: 50
                                                                                                                                                                                                                                                                                                                                                                Sequence 48936, Application US/09864761 Patent No. US20020048763A1
                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
APPLICANT: Penn, Sharron G.
APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K.
APPLICANT: Chen, Wensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL
TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
FILE REFERENCE: Aeomica X-1
CURRENT APPLICATION NUMBER: US/09/864,761
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PRIOR APPLICATION NUMBER: US 60/234,687
PRIOR FILING DATE: 2000-09-21
PRIOR APPLICATION NUMBER-IIS 09/608,408
PRIOR FILING DATE: 2000-06-30-7
PRIOR APPLICATION NUMBER: US 09/774,203
PRIOR FILING DATE: 2001-01-29
PRIOR FILING DATE: 2001-01-29
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PRIOR APPLICATION NUMBER: PCT/US01/00670
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PRIOR APPLICATION NUMBER: PCT/US01/00662
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PRIOR APPLICATION NUMBER: PCT/US01/00669
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PRIOR FILING DATE: 2000-09-27
PRIOR APPLICATION NUMBER: PCT/US01/00666
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APPLICATION NUMBER: PCT/US01/00668
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EXPRESSED IN BONE ME
EXPRESSED IN BRAIN,
EXPRESSED IN PLACENT
EXPRESSED IN ADULT I
EXPRESSED IN BTA774,
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ED IN LUNG, SIGNAL = 1.5
ED IN BRAIN, SIGNAL = 1.8
ED IN PLACENTA, SIGNAL = 1.7
ED IN POLAT LIVER, SIGNAL = 1.7
ED IN FETAL LIVER, SIGNAL = 1.3
ED IN HEART, SIGNAL = 1.3
ED IN HEART, SIGNAL = 1.5
ED IN HELAR, SIGNAL = 1.5
ED IN HELAR, SIGNAL = 1.2
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Pred. No. 1.9e-07;
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FOR

PRIOR FILING DATE: 2000-05-26

PILING DATE: 2000-02-04
APPLICATION NUMBER: US 60/207,456

APPLICATION NUMBER: US 60/180,312

2001-05-23

CURRENT FILING DATE:

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RESULT 6
US-09-941-314-3
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APPLICANT: ZymoGene
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PRIOR APPLICATION NUMBER: US 09/774,203
PRIOR FILING DATE: 2001-01-29
NUMBER OF SEQ ID NOS: 49117
SOFTWARE: Annomax Sequence Listing Engine vers.
                  CURRENT APPLICATION NUMBER: US/09/941,314
CURRENT FILING DATE: 2001-08-29
PRIOR APPLICATION NUMBER: 60/230,230
PRIOR FILING DATE: 2001-09-01
                                                                                                  APPLICANT: ZymoGenetics, Inc.
TITLE OF INVENTION: Mammalian Cystatin-8 and Its Use to
TITLE OF INVENTION: Inhibit Cancer Procoagulant Proteir
FILE REFERENCE: 00-81PC
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PRIOR FILING DATE: 2000-08-03
TUMBER OF SEQ ID NOS: 19
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OTHER INFORMATION: EXPRESSED IN BT474, SIGNAL = 0.96
OTHER INFORMATION: EST HUMAN HIT: AIZ00857.1, EVALUE 5.00e-23
OTHER INFORMATION: SWISSPROT HIT: O60676, EVALUE 1.00e-01
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APPLICATION NUMBER: PCT/US01/00669
FILING DATE: 2001-01-30
APPLICATION NUMBER: PCT/US01/00665
FILING DATE: 2001-01-30
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APPLICATION NUMBER: PCT/US01/00667
FILING DATE: 2001-01-30
APPLICATION NUMBER: PCT/US01/00664
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FILING DATE: 2000-10-04
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APPLICATION NUMBER: PCT/US01/00668
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                                                                                                               US-09-941-314-2
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US-09-941-314-2
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US-09-941-314-4
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Patent No. US20020142396A1
GENERAL INFORMATION:
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CURRENT FILING DATE: 2001-08-29
PRIOR APPLICATION NUMBER: 60/230,230
PRIOR FILING DATE: 2001-09-01
NUMBER OF SEQ ID NOS: 19
SOFTWARE: FastSEQ for Windows Version 4.0
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CURRENT FILING DATE: 2001-08-29
PRIOR APPLICATION NUMBER: 60/230,230
PRIOR FILING DATE: 2001-09-01
NUMBER OF SEQ ID NOS: 19
                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: Mammalian Cystatin-8 and Its TITLE OF INVENTION: Inhibit Cancer Procoagulant FILE REFERENCE: 00-81PC
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                                                                                                                                           LENGTH: 137
TYPE: PRT
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Local Similarity 100.0%;
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                                                Conservative
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                                                100.0%; Score 99; DB 10; 100.0%; Pred. No. 5.2e-07; ive 0; Mismatches 0;
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Pred. No. 4.4e-07;
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Pred. No. 4.3e-07;
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Protein
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US-09-941-314-15

US-09-941-314-15

; Sequence 15, Application Us

; Patent No. US20020142396A1
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-941-314-13
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US-09-941-314-9
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              GENERAL INFORMATION:
APPLICANT: ZymoGenetics, Inc.
TITLE OF INVENTION: Mammalian Cystatin-8 and Its Use to
TITLE OF INVENTION: Inhibit Cancer Procoagulant Protein
FILE REFERENCE: 00-81PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 60/230,230
PRIOR FILING DATE: 2001-09-01
NUMBER OF SEQ ID NOS: 19
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:

APPLICANT: ZymoGenetics, Inc.

TITLE OF INVENTION: Mammalian Cystatin-8 and Its Use to

TITLE OF INVENTION: Inhibit Cancer Proceedulant Protein

PILE REFERENCE: 00-81PC

CURRENT APPLICATION NUMBER: US/09/941,314

CURRENT FILING DATE: 2001-08-29

CURRENT FILING DATE: 2001-08-29
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APPLICANT: ZymoGenetics, Inc.
TITLE OF INVENTION: Mammalian Cystatin-8 and Its Use to
TITLE OF INVENTION: Inhibit Cancer Procoagulant Protein
FILE REFERENCE: 00-81PC
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 9
LENGTH: 27
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Patent No. US20020142396A1
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Best Local 9
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CURRENT FILING DATE: 2001-08-29
CURRENT APPLICATION NUMBER: US/09/941,314
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                                                                                                                                                                                                                                                                                                        Match 55.6%; Score 55, Local Similarity 100.0%; Pred. No. 0.4
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0.47;
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RESULT 13 US-09-815-242-12456 ; Sequence 12456, Application US/09815242 ; Patent No. US20020061569A1

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CURRENT FILING DATE: 2001-08-29
PRIOR APPLICATION NUMBER: 60/230,230
PRIOR FILING DATE: 2001-09-01
NUMBER OF SEQ ID NOS: 19
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 15
LENGTH: 80
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: Identification of Essential Genes in TITLE OF INVENTION: Prokaryotes
FILE REFERENCE: ELITRA.011A
CURRENT APPLICATION NUMBER: US/09/815,242
CURRENT FILING DATE: 2001-03-21
PRIOR APPLICATION NUMBER: 60/191,078
PRIOR FILING DATE: 2000-03-21
PRIOR PRIOR PRICINGUE DATE: 2000-03-21
PRIOR FILING DATE: 2000-03-23
PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/207,727
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                                                                                                                                                        ; ORGANISM: Staphylococcus aureus US-09-815-242-5584
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US-09-815-242-5584
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PRIOR FILING DATE: 2000-10-23
PRIOR APPLICATION NUMBER: 60/253,625
PRIOR FILING DATE: 2000-11-27
PRIOR APPLICATION NUMBER: 60/257,931
PRIOR FILING DATE: 2000-12-22
PRIOR APPLICATION NUMBER: 60/269,308
PRIOR APPLICATION NUMBER: 60/269,308
PRIOR PILING DATE: 2001-02-16
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SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 5584
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                                                                             Matches
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                                                                                                               Query Match
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                                  1 KDSLQWITDQYNKESD 16
                                                                           Similarity 7; Conserv
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KOKILAWVNINOYMKOKD 333
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Xu, H. Howard
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                                                                                             Score 46; DB
Pred. No. 97;
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                                                                                                                 DB 9;
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BENERAL INFORMATION:

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RESULT 14
US-10-369-493-10941
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                                                                                        ; ORGANISM: Ferroplasma acidarmanus
US-10-369-493-10941
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PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR APPLICATION NUMBER: 60/242,578
PRIOR APPLICATION NUMBER: 60/242,578
PRIOR FILING DATE: 2000-10-23
PRIOR APPLICATION NUMBER: 60/253,625
PRIOR FILING DATE: 2000-11-27
PRIOR APPLICATION NUMBER: 60/257,931
PRIOR PILING DATE: 2000-11-22
PRIOR FILING DATE: 2000-12-22
PRIOR FILING DATE: 2000-12-22
                                                                                                                                                 CURRENT FILING DATE: 2003-02-28
PRIOR APPLICATION NUMBER: US 60/360,039
PRIOR APPLICATION NUMBER: US 60/360,039
PRIOR FILING DATE: 2002-02-21
NUMBER OF SEQ ID NOS: 47374
SEQ ID NO 10941
LENGTH: 418
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LENGTH: 487
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Best Local Similarity
Matches 8; Conserv
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                                            Query Match
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APPLICANT: Hinkle, Gregory J.
APPLICANT: Slater, Steven C.
APPLICANT: Goldman, Barry S.
APPLICANT: Chen, Xianfeng
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-09-815-242-12456
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PRIOR FILING DATE: 2001-02-16
NUMBER OF SEQ ID NOS: 14110
                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF TITLE OF INVENTION: PLANTS WITH IMPROVED PROPERTIES FILE REFERENCE: 38-10(52052)B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: PastSEQ for Windows Version 4.0
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TITLE OF INVENTION: Prokaryotes
FILE REFERENCE: ELITEA.011A
CURRENT APPLICATION NUMBER: US/09/815,242
CURRENT FILING DATE: 2001-03-21
PRIOR APPLICATION NUMBER: 60/191,078
PRIOR FILING DATE: 2000-03-21
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APPLICANT: Ohlsen, Ka
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Local Similarity 43.8%; Pred. No. 98;
les 7; Conservative 3; Mismatches
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      Conservative
                    44.4%;
Score 44; DB 12; Length 418; Pred. No. 1.6e+02; 3; Mismatches 3; Indels
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Search completed: January 21, 2004, 12:17:40 Job time : 7.3871 secs

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                                                                                                                                                                   ; ORGANISM: Streptococcus pneumoniae US-09-815-242-13425
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US-09-815-242-13425
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PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR FILING DATE: 2000-05-26
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: 60/242,578
PRIOR FILING DATE: 2000-10-23
PRIOR APPLICATION NUMBER: 60/253,625
PRIOR FILING DATE: 2000-11-27
PRIOR APPLICATION NUMBER: 60/257,931
PRIOR APPLICATION NUMBER: 60/257,931
PRIOR FILING DATE: 2000-12-22
PRIOR FILING DATE: 2000-12-22
                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS: 14110
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 13425
                                                                                  Matches
                                                                                                    Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: Identification of Essential Genes
TITLE OF INVENTION: Prokaryotes
FILE REFERENCE: ELITEA.011A
CURRENT APPLICATION NUMBER: US/09/815,242
CURRENT FILING DATE: 2001-03-21
PRIOR APPLICATION NUMBER: 60/191,078
PRIOR FILING DATE: 2000-03-21
                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: 60/269,308 PRIOR FILING DATE: 2001-02-16
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382 LQKITDAYNRDAD 394
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(8)
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Xu, H. Howard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Wall, Daniel
Trawick, John D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ohlsen, Kari L.
Zyskind, Judith W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Carr, Grant J.
                                                                                  Conservative
                                                                                                    44.4%;
                                                                                                 Score 44; DB 9;
Pred. No. 1.9e+02;
                                                                                  Mismatches
                                                                                                                       Length 481;
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Result
No.
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Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Minimum DB seq length: 0 Maximum DB seq length: 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OM protein - protein search, using sw model
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       3333654332111111111
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score
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Gapop 10.0 , Gapext 0.5
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Match
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99
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                                           SwissProt_41:*
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
       GenCore version 5.1.6 (c) 1993 - 2004 Compugen Ltd:
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CAT9 FASHE
LE06 BIOGL
RPOC MYCGA
RANC RANPI
RANR RANRU
GON1 PETMA
SP34 DICMU
GON1 PETMA
SP34 DICMU
GON2 MAMBR
AEGL AGRAE
AL19 CARMA
UH05 RAT
N040 SOYBN
LE05 BIOGL
TRYP FELCA
LPW CORGL
LPCA STAAU
LSK2 LEUMA
MP2 MICOC
N040 TOBAC
E121 LITRU
E118 RANTE
ECDA LYMDI
GR78 HORSE
PGKH PHYRO
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                     P08951 rana pipien
P08952 rana rugosa
P04378 petromyzon
P81545 dictyosteli
P81285 mamestra br
P83465 agrocybe ae
P81822 carcinus ma
P56573 rattus norv
P55960 glycine max
P80744 biomphalari
P81071 felis silve
P06556 corynebacte
P36884 staphylococ
P90930 leucophaea
P81533 microplitis
P55962 nicotiana t
P82097 litoria rub
P82097 litoria au
P81411 porphyromon
P57104 rana tempor
P80938 lymantria d
P16392 equus cabal
P80936 physcomitre
P08945 litoria aur
P08945 litoria aur
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P80745 biomphalari
P47716 mycoplasma
P08951 rana pipien
P08952 rana rugosa
P04378 petromyzon
P81545 dictyosteli
P81285 mamestra br
P83465 agrocybe ae
P81822 carcinus ma
P56573 rattus norv
P55960 glycine max
P80744 biomphalari
P81071 felis silve
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	Q05564 klebsiella			P81814 carcinus ma	P30369 macropus eu	P20032 proteus vul			P22585 psophocarpu		-	

ALIGNMENTS

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RESULT 3

RPOC_MYCGA
ID RPOC M
AC P47716
D1-FEB
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Matches 4
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Best Local
                                                                                                                                                                                                                                                                                                                      use by non-profit institute. There are no restrictions on its modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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"A family of fibrinogen-related proteins that precipitates parasite-
"a family of fibrinogen-related proteins that precipitates parasite-
"a family of fibrinogen-related proteins after infection.";

Proc. Natl. Acad. Sci. U.S.A. 94.8691-8696(1997).

-I- FUNCTION: BINDS AND PRECIPITATES ANTIGENS OF THE PARASITE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRAIN=A5969Var.B;
Skamrov A.V., Feoktistova E.S.,
Bibilashvili R.S.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mycoplasma gallisepticum.
Bacteria; Firmicutes; Mollicutes; Mycoplasmataceae; Mycoplasma.
                                                                                                                                                                                                                                                                                               EMBL; L38402; AAB40952.1;
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                                                                                                                                                                                                                                                                     Transferase; DNA-directed RNA polymerase; Transcription
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NCBI_TaxID=2096;
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28-FEB-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        {RNA} (N).
SUBUNIT: THE ENZYME CONSISTS OF THE ENZYME WHICH IS COMPOSED OF 2 ALPHA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SIMILARITY: BELONGS TO THE RNA POLYMERASE BETA' CHAIN FAMILY.
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CATALYTIC ACTIVITY: N nucleoside triphosphate =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              mitted (XXX-1995) to the EMBL/GenBank/DDBJ databases.
FUNCTION: DNA-DEPENDENT RNA POLYMERASE CATALYZES THE TRANSCRIPTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ECHINOSTOMA PARAENSEI.
SUBCELLULAR LOCATION: SECRETED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OF DNA INTO RNA USING THE FOUR RIBONUCLEOSIDE
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                                                                                                                                                                                                                  13 AA;
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Pred. No. 5.2e+02;
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Pred. No. 5.9e+02;
; Mismatches 2
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                                                                                                                                                                                                                  4BEC27C7480D4333 CRC64;
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P08951;
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PROSITE; PS00257; BOMBESIN; 1.

Amphibian defense peptide; Bombesin MOD RES

11

SEQUENCE 11 AA; 1304 MW; D6C9885
                                                                                                                                                                                                     Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea; Ranidae; Rana
NCBI_TaxID=8410;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nakajima T.;

Unpublished results, cited by:

Erspamer V., Erspamer G.F., Mazzanti G., Endean R.;

Comp. Biochem. Physiol. 77C:99-108(1984).

1- SUBCELLULAR LOCATION: Secreted.

1- TISSUS EPECIFICITY: Skin.

1- TISSUS EPECIFICITY: Skin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rana pipiens (Northern leopard frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea; Ranidae; Rana.
         Amphibian defense peptide; Bombesin family; Amidation MOD_RES 17 17 AMIDATION
                                InterPro; IPR000874; Bombesin.
Pfam; PF02044; Bombesin; 1.
PROSITE; PS00257; BOMBESIN; 1.
                                                                                                 Erspamer V., Erspamer G.F., Mazzanti G., Comp. Biochem. Physiol. 77C:99-108(1984)
-i- SUBCELLULAR LOCATION: Secreted.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TISSUE=Skin secretion;
MEDLINE=84131098; PubMed=6141890;
                                                                              -!- TISSUE SPECIFICITY:
                                                                                                                                     Unpublished results, cited by:
                                                                                                                                                                         TISSUE=Skin secretion;
                                                                                                                                                                                                                                            Rana rugosa (Wrinkled frog).
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                                                                                                                                                            MEDLINE=84131098; PubMed=6141890;
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(Rel.
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(Rel. 09, Last sequence up
(Rel. 42, Last annotation
                                                                                                                                                                                                                                                                                                               STANDARD;
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                                                                               BELONGS TO THE BOMBESIN/NEUROMEDIN B/RANATENSIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 09, Created)
09, Last sequence up
42, Last annotation
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                                                                                                                                                                                                                                                                             sequence update)
                                                                                                                                                                                                                                                                                                                                                                                                                               Score 22;
Pred. No.
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D6C9885A61ADC366
3A876B35A581863E CRC64;
                                                                                                                                                                                                                                                                                                                PRT;
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Schreiner S.J.;
Schreiner S.J.;
"Characterization of a surface protein in macrocysts or uncuyouser.";
mucoroides.";
Submitted (NOV-1998) to the SWISS-PROT data bank.
Submitted (NOV-1998) to the PRESENT IN THE MACROCYST PRIMARY WALL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hormone;
MOD_RES
MOD_RES
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                            15-JUL-1999 (Rel. 38, Created)
15-JUL-1999 (Rel. 38, Last sequ
15-JUL-1999 (Rel. 38, Last anno
Surface protein P34 (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           brain.";
J. Biol. Chem. 261:4812-4819(1986).
-i- FUNCTION: Stimulates the secretion of -i- FUNCTION: of both luteinizing and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GON1_F
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P81545;
                                                                                                                                                                                            STRAIN=DM-7;
                                                                                                                                                                                                                                                                                                                       Dictyostelium mucoroides (Slime mold).
Eukaryota; Mycetozoa; Dictyosteliida; Dictyostelium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DICMU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE=86168192; PubMed=3514603; Sherwood N.M., Sower S.A., Marshak D.R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa;
Petromyzontiformes;
                                                                                                                                                                                                                                   SEQUENCE
                                                                                                                                                                                                                                                                                       NCBI_TaxID=31287;
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; A01412; RHLMGS.
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PS00473; GNRH; 1.

PS00473; GNRH; 1.

Amidation; Hypothalamus; Pyrrolidone carboxylic acid.

PYRROLIDONE CARBOXYLIC ACID.

1 1 1 AMIDATION.

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3; Conservative
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Metazoa; Chordata; Craniata; Vertebrata;
tiformes; Petromyzontidae; Petromyzon.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
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75.0%;
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Last annotation updat
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1.6e+03;
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1.3e+03;
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follicle-stimulating
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                                                                                                                                     Dictyostelium
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P83465;
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15-JUL-1998 (Rel. 36, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
15-JUL-1999 (Rel. 38, Last annotation update)
Antennal odorant-binding protein (AOBP) (Frag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NON TER
SEQUENCE
        SEQUENCE, FUNCTION, AND SUBUNIT.
STRAIR=PAP2 98; TISSUB=Fruiting body;
MEDLINE=22015236; PubMed=12020804;
Berne S., Krizaj I., Pohleven F., Turk T., Macek
"Pleurotus and Agrocybe hemolysins, new proteins
involved in fungal fruiting.";
                                                                                                    Aegerolysin (Fragment).
Agrocybe aegerita (Black poplar mushroom).
Eukaryota, Fungi, Basidiomycota; Hymenomycetes; Homobasidiomycetes;
Eukaryota, Fungi, Basidiomycota.
Agaricales; Bolbitiaceae; Agrocybe.
                                                                                                                                                                                                              AGRAE
                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE=99097262; PubMed=9878563;
Bohbot J., Sobrio F., Lucas P., Nagnan-Le Meillour P.;
"Functional characterization of a new class of odorant-binding
proteins in the moth Mamestra brassicae.";
Biochem. Biophys. Res. Commun. 253:489-494(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE.
TISSUE=Antenna;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Lepidoptera; Glossata; Ditrysia; Noctuoidea;
Noctuidae; Hadeninae; Mamestra.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MAMBR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cell wall.
                                                                                                                                                                                                                                                                                                                                                                              Olfaction; Transport
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                                                                                           NCBI_TaxID=5400;
                                                                                                                                                    28-FEB-2003
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28-FEB-2003
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SUBCELLULAR LOCATION: MACROCYST PRIMARY WALL.
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Biophys. Acta 1570:153-159(2002)
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DOMAIN
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SEQUENCE
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15-DEC-1998 (Rel. 37, Cast sequence update)
15-DEC-1998 (Rel. 37, Last sequence update)
15-DEC-1998 (Rel. 37, Last annotation update)
15-DEC-1998 (Rel. 37, Last annotation update)
15-DEC-1998 (Rel. 37, Last annotation update)
                                                                                                                                                                                                                                                                                                                  allatostatin superfamily in the shore crab Carcinus Eur. J. Biochem. 250:727-734 (1997).
-i- FUNCTION: MAY ACT AS A NEUTOTRANSMITTER OR NEUTO-1- SIMILARITY: BELONGS TO THE ALLATOSTATIN FAMILY Neuropeptide; Amidation; Multigene family.

MOD_RES 10 10 AMIDATION (POTENTIAL)
STRAIN=Wistar; TISSULI X.-P., Pleissner Jungblut P.R.;
                                                                 Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                        TISSUE=Cerebral ganglion, and Thoracic ganglion MEDLINE=98121193; PubMed=9461295; Duve H., Johnsen A.H., Maestro J.-L., Scott A.G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Carcinus maenas (Common shore crab) (Green crab).
Eukaryota, Metazoa; Arthropoda; Crustacea; Malacostraca;
Eumalacostraca; Eucarida; Decapoda; Pleocyemata; Brachyu:
Eubrachyura; Portunoidea; Portunidae; Carcinus.
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                                     SEQUENCE
                                                      NCBI_TaxID=10116;
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30-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                    Isolation and identification of multiple neuropeptides
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SUBUNIT: Monomer.

SIMILARITY: BELONGS TO THE AEGEROLYSIN FAMILY.
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            TISSUE=Heart;
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Early nodulin 40.
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-!- MISCELLANEOUS: ON THE 2D-GEL THE DETERMINED I
PROTEIN IS: 8.3, ITS MW IS: 30 kDa.
                                                                                                                                                                                                This SWISS-PROT entry is copyright. It is produced through a collab between the Swiss Institute of Bioinformatics and the EMBL outst the European Bioinformatics Institute. There are no restrictions use by non-profit institutions as long as its content is in modified and this statement is not removed. Usage by and for comentities requires a license agreement (See http://www.isb-sib.ch/anor send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                       Yang W.C., Katinakis P., Hendriks P., Smolders Spee J., van Kammen A., Bisseling T., Fransesn "Characterization of GmENDH40, a gene showing specific expression during soybean nodule deve plant J. 3:573-585(1993).

-I- FUNCTION: MODULATES THE ACTION OF AUXIN, A GROWTH REGULATOR THAT ALTERS PHYTOHORMONE SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Roside eurosids I; Fabales; Fabaceae; Papilionoideae; Phaseoleae; Glycine
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01-NOV-1997
                                                                                                                                                    SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE=94035161; PubMed=8220464;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Glycine max (Soybean).
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T., Franssen H.;
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-I- CATALYTIC ACTIVITY: Preferential cleavage: Arg-|-Xaa, Lys-|-
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P81071;
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MEDLINE=97385165; PubMed=9238039;

Adema C.M., Hertel LaA., Miller R.D., Loker E.S.;

"A family of fibrinogen-related proteins that precipitates parasitederived molecules is produced by an invertebrate after infection.";

Proc. Natl. Acad. Sci. U.S.A. 94:8691-8696(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Felis silvestris catus (Cat).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Butheria; Carnivora; Fissipedia; Felidae;
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01-NOV-1997 (Rel. 35, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation updat
Trypsin precursor (EC 3.4.21.4) (Fragment).
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Lymnaeoidea; Planorbidae; Biomphalaria.
                                                                                                                                                                                                                                                                                                                                InterPro; IPR001254; Ser_protease Try.
PROSITE; PS50240; TRYPSIN DOM; PARTIAL.
PROSITE; PS00134; TRYPSIN HIS; PARTIAL.
PROSITE; PS00135; TRYPSIN_SER; PARTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE.
TISSUE=Pancreas;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FELCA
                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                                                                                      Hydrolase;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NCBI_TaxID=9685;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Biomphalaria
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                                                                                                                                                                                                                              NON TER
                                                                                                                                                                                                                                                                                                                                                                                                                                -!- SUBCELLULAR LOCATION: Extracellular.
-!- SIMILARITY: BELONGS TO PEPTIDASE FAMILY S1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE=97235546; PubMed=9080665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Lectin.
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SUBCELLULAR LOCATION: SECRETED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FUNCTION: BINDS AND PRECIPITATES ANTIGENS OF THE PARASITE
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                                                                                            Similarity
3; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity 3; Conserv
                                                  ESDDK 18
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DDDDDK 8
                                                                                                                                                                                                                                                                              Serine protease; Digestion; Pancreas; Zymogen.

1 8 ACTIVATION PEPTIDE.
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1790 MW;
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37.5%;
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                                                                                                                       Score 19; DB 1;
Pred. No. 4.3e+03;
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                                                                                                                                                                                                                                                      TRYPSIN.
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Query Match
Best Local Similarity
Matches 3; Conserv
                                                                                                               Tryptophan 
SEQUENCE
                                                                                                                                                                                          EMBL;
                                                                                                                                                                                                                                                EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                 This SWISS-PROT entry is copyright. It is produced through a collab between the Swiss Institute of Bioinformatics and the EMBL outst the European Bioinformatics Institute. There are no restrictions use by non-profit institutions as long as its content is in modified and this statement is not removed. Usage by and for com
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "Complete genomic sequence of Corynebacterium glutamicum ATCC 13032.";
Submitted (MAY-2002) to the EMBL/GenBank/DDBJ databases.
-i- FUNCTION: THIS PROTEIN IS INVOLVED IN CONTROL OF THE BIOSYNTHESIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRAIN=ATCC 13059 / AS019;
MEDLINE=91088299; PubMed=2263476;
Heery D.M., Dunican L.K.,
"Nucleotide sequence of the Corynebacterium glutamicum
Nucleic Acids Res. 18:7138-7138(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Structure and function of the trp operon control regions of Brevibacterium lactofermentum, a glutamic-acid-producing bacterium."; Gene 53:191-200(1987).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Two single-base-pair substitutions causing desensitization to tryptophan feedback inhibition of anthranilate synthase and enhance expression of tryptophan genes of Brevibacterium lactofermentum."; J. Bacteriol. 169:5330-5332(1987).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Brevibacterium lactofermentum tryptophan operon. Nucleic Acids Res. 14:10113-10114(1986).
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Bacteria; Actinobacteria; Actinobacteridae; Actinomycetales;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Trp operon leader peptide.
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28-FEB-2003
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                                                                                                                                                                                                                                                                                                         EMBL;
                                                                                                                                                                                                                                                                                                                                                             entities requires a license agreement (S or send an email to license@isb-sib.ch).
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STRAIN=ATCC 13032
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Matsui K., Miwa K., Sano K.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matsui K., Sano K., Ohtsubo E.; "Complete nucleotide and deduced amino acid sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A. MEDLINE=87117512; PubMed=3808947;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sano K., Matsui K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE=87277409;
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                                                                                                                                                                                    X04960; CAA28622.1; -. M17992; AABS9110.1; -. M16663; -, NOT_ANNOTATED_CDS. X55994; CAA39466.1; -. AP005283; -, NOT_ANNOTATED_CDS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TRYPTOPHAN
                                                                                                            biosynthesis;
17 AA; 2112 P
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(Rel. 06, Last sequence up
(Rel. 41, Last annotation
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                            19.2%;
                                                                                                            ; Leader peptide; Complete proteome MW; 74C7E7924DAAB56B CRC64;
                         Score 19; DB 1;
Pred. No. 4.6e+03;
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Match
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Q90xt2 larus glauc		077918 pseudotroph	077906 oreochromis	077892 oreochromis		Q47606 escherichia		Q9n6m5 toxoplasma	\vdash		P82674 bos taurus			Q9ur62 uromyces ap	Q62436 mus musculu			-	Q9ure0 saccharomyc	Q9r563 escherichia	Q9kcs9 bacillus ha	Q43174 solanum tub	Q50019 mycobacteri	077893 oreochromis	Q8r170 mus musculu	Q9nsf0 homo sapien	escher	Q9ps13 gallus gall

ALIGNMENTS

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RESULT 2
Q8VLX6
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AC Q8VL
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O15222;
O1-JAN-1998 (TrEMBLrel. 05, C
O1-JAN-1998 (TrEMBLrel. 05, I
O1-DEC-2001 (TrEMBLrel. 19, I
Q8VLX6;
                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.

MEDLINE-98019011; PubMed-9357979;

RIBGINE-98019011; PubMed-9357979;

Plagiello D., Gibaud A., Dutrillaux B., Poupon M.F., Malfoy B.;

"Distinct patterns of all-trans retinoic acid dependent expression of the HOXE and HOXC homeogenes in human embryonal and small-cell lung carcinoma cell lines.";

FEBS Lett. 415:263-267(1997).

EMBL, X99682, CAA67998.1; -.
                                                                                                                                                                                                                                                            SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                             TRANSFAC; T03327; -.
NON_TER 1
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71.4%;
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P91578
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01-NOV-1996 (TEMBLIEL 01,
01-JUN-2000 (TEMBLIEL 14,
CTYJIB protein (France)
                                                           01-MAY-1997 (TrEMBLrel. 03, Created)
01-MAY-1997 (TrEMBLrel. 03, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
Nucleoside triphosphate phosphohydrolase (Fragment).
NPH I.
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Q53399;
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MEDLLINE=94123945, PubMed=8293956;

Hodgman T.C., Ziniu Y., Shen J., Ellar D.J.;

Hodgman T.C., Ziniu Y., Shen J., Ellar D.J.;

"Identification of a cryptic gene associated with an insertion sequence not previously identified in Bacillus thuringiensis.";

FEMS Microbiol. Lett. 114:23-29(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bacillus thuringiensis.
Bacteria; Firmicutes; B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          from T. thermophilus.";
Submitted (JAN-2001) to the EMBL/GenBank/DDBJ databases
EMBL; AJ307316; CAC83723.1; -.
                   Choristoneura fumiferana
Viruses; dsDNA viruses, r
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE
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01-MAR-2002
Entomopoxvirus
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Cloning and characterisation of the czrB metal cation efflux
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                   no RNA stage; Poxvirida
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1; Mismatches
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Pred. No.
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                     Poxviridae; Entomopoxvirinae;
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RESULT 6
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SEQUENCE FROM N.A.
MEDLINE=22378671; PubMed=12490322;
Li M., Wang Y., Yu Y., Nishizawa M., Nakajima T., Ito
"The human transcription factor activation protein-2 c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; I
Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-MAR-2003 (TrEMBLrel. 23, Created)
01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
Transcription factor AP-2 gamma (Fragment).
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RMRI. 110030 NRBACT
STRAIN=H2BC1;
MEDLINE=20014165; PubMed=10548129;
Peters A.A., Oger J.J., Coulthart
                                                                                                                                                                                                               01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2000 (TrEMBLrel. 13, Last annotation updat
Transcriptional transactivator Tax (Fragment).
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                                                                                                                                               Human T-cell leukemia virus type II (HTLV-II).
Viruses; Retroid viruses; Retroviridae; Deltaretrovirus.
                                                                                                                                                                                                                                                                                                             Q9PYL3;
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EMBL; AF544986; AAN37906.1;
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MEDLINE=97239890; PubMed=9085546;
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Pred. No. 4.2e+03;
2; Mismatches 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 23.5;
Pred. No. 5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    F88CAEF56EEFC601 CRC64;
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           D.J.,
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Q8SPT4;
01-JUN-2002
01-JUN-2002
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01-MAY-1997 (TrEMBLrel. 03, Last sequence update)
01-JAN-1999 (TrEMBLrel. 09, Last annotation update)
01-JAN-1999 (TrEMBLrel. 09, Last annotation update)
CYT1 region of membrane cofactor protein (MCP, CD46) (Fragment).
Cercopithecus aethiops (Green monkey) (Grivet).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalla; Butheria; Primates; Catarrhini; Cercopithecidae;
Cercopithecinae; Cercopithecus.
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                                    Norgren R.B. Jr., Zink M.A., "Construction of a targeted Submitted (MAR-2002) to the
                                                                                                                                                                                                                                                      Macaca mulatta (Rhesus macaque)
Eukaryota; Metazoa; Chordata; C
Mammalia; Eutheria; Primates; C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE=97149841; PubMed=8996635;
Murakami Y., Seya T., Kurita M., Nagasawa &
"Molecular cloning of a complementary DNA i
protein (MCP, CD46)/measles virus receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              phylogenetic characterisation.";
J. Clin. Virol. 14:37-50(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "An apparent case of human T-cell lymphotropic virus type II (HTLV-II)-associated neurological disease: a clinical, molecular, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bio
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      EMBL;
                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                             NCBI_TaxID=9544;
                                                                                                                                                                                                                               Cercopithecinae;
                                                                                                                                                                                                                                                                                                                                                             CLCN2.
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Biol. Pharm. Bull. 19:1541-1545(1996).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NCBI_TaxID=9534;
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BL; AF115495; AAF15550.1; -.
      AF489851; AAL96695.1;
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(TrEMBLrel. 21, Last
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33.3%;
                                 , Jia Y., Ojeda S.R., Spindel rhesus macaque microarray."; EMBL/GenBank/DDBJ databases.
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Pred. No.
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l; Mismatches
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Craniata; Vertebrata; Eutele
Catarrhini; Cercopithecidae;
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annotation update)
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6.9e+03;
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                                                                                                   E.R.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-AUG-1998 (TrEMBLrel. 07, Created)
01-AUG-1998 (TrEMBLrel. 07, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
Membrane cofactor protein CD46 (Fragment).
Saguinus cedipus (Cotton-top tamarin).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Primates; Platyrrhini; Callitri
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Shames S.L.; Enzymes for the resolution of alpha-tertiary-substituted carboxylic acid esters.";
                                                                                                                                                                                                                                                                       MEDIINE=98161817; PubMed=9494106;
Murakami Y., Seya T., Kurita M., Fukui A
"Molecular cloning of membrane cofactor
cell, an Epstein-Barr virus-transformed
is susceptible to infection by the CAM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           062645;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           062645
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ester hydrolase, CLEH (Fragment).
Yarrowia lipolytica (Candida lipolytica).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-MAY-2000
01-JUN-2002
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01-MAY-2000
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                                                                                                                         SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                    STRAIN=B95-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID=9490;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
                                                                                                                                                          NON TER
                                                                                                                                                                                   EMBL; AB001991; BAA25631.1;
                                                                                                                                                                                                                      Biochem. J.
                                                                                                                                                                                                                                          the measles virus.";
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3; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17 AA;
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                                                                                                                             17
                                                                                                                                                                                                                   330:1351-1359(1998).
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                                                                                                                      AΑ;
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                                                                                                                         1983 MW;
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Last annotation updat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 23; DB Pred. No. 7.4e 2; Mismatches
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    Mismatches

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Pred.
   Score 23; DB 6; 1
Pred. No. 7.4e+03;
5; Mismatches 1
                                                                                                                             1301A0ECD008F939 CRC64;
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Platyrrhini; Callitrichidae; Saguin
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                                                                                                                                                                                                                                                                                                                                                                       Fukui A.,
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                                                                                                                                                                                                                                                                             A., Ueda S., Nagasawa S.;
protein (MCP; CD46) on B95a
marmoset B cell line: B95a-MCP
but not the Nagahata strain of
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Saguinus.
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Q9ZY75;
01-MAY-1999
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SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q30218
Q30218;
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01-MAY-1999 (TrEMBLrel. 10, Last sequence update)
01-MAY-1999 (TrEMBLrel. 10, Last annotation update)
Cytochrome oxidase II (Fragment).
                                                                                                                                                                                                                                                                                                                             the hymenoptera.";
Mol. Biol. Evol. 16:298-309(1999).
EMBL; AF082926; AAD17786.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Hymenoptera; Apocrita; Ichneumonoide
Braconidae; Cenocoelinae; Cenocoelius.
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MEDLINE=96124133; PubMed=8552454;

Forster H.H., Wasch R., Kretschmar T., Mischke D.,

Forster H.H., Wasch R., Ziegler A., Schmitt M., Wahn H.U.;

"Genetic markers on chromosome 19p and prenatal diagnosis

"Geneticient combined immunodeficiency.";
                                                                                                                                                                                                                                                                                                     Mitochondrion.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE=99152621; PubMed=10028295;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=81081;
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Mammalia; Eutheria; Primates;
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                                                                                                    Conservative
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Pred. No. 7.9e
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Pred. No.
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RESULT 15
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                                     Q9S8W8;
Q9S8W8;
01-MAY-2000
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Q9QW82;
01-MAY-2000
 01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-OCT-2001 (TrEMBLrel. 18, Last annotation update)
SELF-incompatibility 87 glycoprotein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                     Q96QA7;
01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation updat
01-DEC-2001 (TrEMBLrel. 19, Last annotation updat
BALSIA2.1 (Cdd42 guanine exchange factor (GEF) 9
                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                          BA151A2.1 (Cdc42 guanine exchange factor (GEF) 9 (Collybistin, HPBM-2, KIAA0424)) (Fragment).
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Ratt
NCBI_TaxID=10116;
                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                              EMBL; AL451106; CAC88408.1;
NON_TER 10 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ol.MAY-2000 (TrEMBLrel. 13, Created)
Ol-MAY-2000 (TrEMBLrel. 13, Last sequence update)
Ol-CT-2002 (TrEMBLrel. 22, Last annotation update)
PHOSPHOPHORYN-PEPTIDE fragment 12-45 (Fragment).
                                                                                                                                                                                                                                                     Submitted (SEP-2001) to the
                                                                                                                                                                                                                                                                Whitehead
                                                                                                                                                                                                                                                                                                                                      Homo sapiens
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Primates;
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75.0%;
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Pred. No. 6e+0
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Pred. No. 7.
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6e+03;
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OS Nicotiana alata (Winged tobacco) (Persian tobacco).

OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Embryophyta;

OC Asteridae; Jamiids; Solanales; Solanaceae; Nicotiana.

OX NCBI TaxID=4087;

RN (1) - SeQUENCE.

RN SEQUENCE.

RX MEDLINE-92404717; PubMed=2535548;

RX MEDLINE-92404717; PubMed=2535548;

RX Jahnen W., Batterham M.P., Clarke A.B., Moritz R.L., Simpson R.J.;

RT "Identification, isolation, and N-terminal sequencing of style "Identification, isolation, and N-terminal sequencing of style plycoproteins associated with self-incompatibility in Nicotiana RT alata.";

RT alata.";

Plant Cell 1:493-499(1989).

DR Pfam; PP00445; ribonuclease T2; 1.

SQ UENCE 15 AA; 1844 MW; D9F5CBCO5B215937 CRC64;

Query Match 22.2%; Score 22; DB 10; Length 15;

Best Local Similarity 80.0%; Pred. No. 9.1e+03;

Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Matches 35 secs

OY 4 LOWIT 8

Db 9 LOWPT 13
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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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Maximum DB seq length: 18
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Perfect score:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BLOSUM62
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1: /SIDS1/gcgdata/g
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Copyright (c) 1993 - 2004 Compugen Ltd.
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34.3	34.3	34.3	34.3	34.3	34.3	36.4	12.4	0.0	Query Match Length DB	-
17 23	17 23	15 23	14 23	14 22	14 19	14 22	14 20		յth DB	
AAU90733	AAU88219	AAM51461	ABB57615	AAG63778	AAW67541	ABB56674	AAW78256	AAU79857	ID	901887188
Insulin/insulin-l:	Insulin/insulin-li	Human CDV-1-42 pep	IGFBP-1 displacer	Synthetic peptide	IGF-1/IGFBP inhibi	Human SNP related	Fragment of human	Human cystatin-8 (Description	

31 31.3 15 22 AAB67741 31 31.3 15 22 AAB67041	1 31.3 14 23 ABB5	1 31.3 14	1 31.3 14 23	1 31.3 14 23	31.3	1 31.3 14 22	1 31.3 14 22	1 31.3 14 22	1 31.3 14 22	31.3 14 22	31.3 14 22	1 31.3 14 22	31.3 14 22	31.3 14 22	31.3 14 22 AAG6377	31.3 14 22	31.3 14 19 AAW6754	31.3 14 19	.3 14 19	31.3 . 14 19	31.3 14 19	31.3 13 23	32.3 17 23	32.3 17 23	32.3 16 23	32.3 16 22	32.3 14 23	32.3 14	32.3 14 22	32.3 14 22	33.3 17
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NAG63724 NAB67041	ABB57704	ABB57629 ABB57702	ABB57620	ABB57619	ABB57616	NAB67038	AAB67037	AB67008	AAB67007	AB67005	AAG63789	AAG63783	NAG63782	AAG63779	AAG63777	ABB56760	AAW67540	AW67552	AAW67546	AAW67545	AAW67542	AAB21408	AAU90013	AU88216	AE19318	AAB02307	ABB57705	ABB57703	AB67006	AB67004	AAG63978
Synthetic peptide Human insulin-like	P-1	IGFBP-1 displacer IGFBP-1 binding pe	Ļ	Ĺ	Ļ,	IGFRP-1 displacer		Human insulin-	Human insulin-like	Human insulin-like	Synthetic pep	Synthetic peptide				Human SNP related	IGF-1/IGFBP inhib		1/IGFBP	1/IGFBP	IGF-1/IGFBP inhib	Bos taurus isocitr	Insulin/insulin-	Insulin/insulin-li	Blomia tropicalis	Domestic mite	IGFBP-1 binding	IGFBP-1 binding	Human insulin-	insul	Amino acid sequenc

ALIGNMENTS

PPXX	ž 23 Š	1	\$ # \$	5 P i	¥ 8	X Z	80	X Z	2 2	XB	X P	28X	RESULT AAU798 ID A
WPI; 2002-383044/41. Novel isolated mammalian cystatin-8 polypeptide useful for promospermatogenesis, and inhibiting cancer procoagulant protein which	Holloway JL, Gao Z, Bishop PD;	(ZYMO) ZYMOGENETICS INC.	01-SEP-2000; 2000US-230230P.	29-AUG-2001; 2001WO-US26868.	14-MAR-2002.	WO200220567-A2.	Homo sapiens.	sperm motility; fertilisation; antigenic peptide.	Cystatin-8; Zcys8; cancer; procoagulant protein; thrombosis; spermatogenesis; seminal fluid viscosity; cryopreserved sperm;	Human cystatin-8 (Zcys8) antigenic fragment #5.	15-JUL-2002 (first entry)	AAU79857;	RESULT 1 AAU79857 D AAU79857 standard; Peptide; 18 AA.

Novel isolated mammalian cystatin-8 polypeptide useful for promoting spermatogenesis, and inhibiting cancer procoagulant protein which leads

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AAW78256
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CC polypeptide (I). (I) is useful for: inhibiting cancer procoagulant

CC protein in an individual and thus inhibiting the thrombotic events

CC associated with cancer; promoting spermatogenesis, modulating seminal

CC fluid viscosity, enhancing viability of cryopreserved sperm, sperm

CC motility and fertilisation; and as antigenic peptides to generate

CC antibodies. Zcys8 is useful as research reagent for characterising sites

CC of interaction between Zcys8 and its receptor. Zcys8 is useful in

CC enhancing fertilisation during assisted reproduction in humans and in

CC enhancing fertilisation during assisted reproduction in humans and in

CC enhancing fertilisation during assisted reproduction in humans and in

CC entimels. Anti-(I) antibodies are useful to screen biological samples like

Diood, urine, saliva, tissue biopsy and autopsy material in vitro for the

CC presence of Zcys8. The antibodies are also useful to isolate large

CC quantities of Zcys8 protein and DNA sequences that encode Zcys8 genes.

CC The polynucleotide encoding (I) is useful to detect and to localise the

CC copy number changes are useful for in vivo diagnosis. The

CC polynucleotide probes are useful for in vivo diagnosis. The

CC copy number changes, insertions, deletions, restriction site changes and

CC races and contain a mutation in the Zcys8 gene like aneuploidy, gene

CC copy number changes, insertions, deletions, restriction site changes and

CC races and contain a mutation and protein that inactivate the Zcys8 gene.

CC races and contain a material so that inactivate the Zcys8 gene.
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Best Local
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13-JUN-1997;
13-JUN-1997;
13-JUN-1997;
13-JUN-1997;
13-JUN-1997;
13-JUN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; secreted protein; fusion protein; gene therapy; protein therapy; diagnosis; tissue; cancer; tumour, neurodegenerative disorder; leukaemia; developmental abnormality; foetal deficiency; blood; allergy; renal; immune system; asthma; lymphocytic disease; brain; hepatic; lymphoma; inflammation; ischaemic shock; Alzheimer's disease; restenosis; AIDS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cognitive disorder; schizophrenia; prostate; obesity; osteoclast; thymus; osteoporosis; arthritis; testis; lung; thyroiditis; thyroid; digestion;
                                                                                                                                                                                                                                                                                              02-OCT-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           endocrine;
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97US-0049547
97US-0049548
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Pred. No. 1.9e-08;
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05-MAR-2002

(first entry)

Human SNP related amino acid sequence SEQ ID NO:1239

Human; single nucleotide polymorphism; SNP; polymorphism; cytostatic;

ABB56674;

ABB56674 standard; Peptide; 14

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RESULT 3
ABB56674
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Best Local
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13-JUN-1997;
13-JUN-1997;
13-JUN-1997;
                                                                                                                                                                                     This sequence represents a fragment of a secreted human protein encoded by the nucleic acid molecule detailed in the descriptor line. The gene can be used to generate fusion proteins by linking to the gene to a human immunoglobulin Fc portion (e.g. AAX04302) for increasing the stability of the fused protein as compared to the human protein only. The invention relates to 86 novel genes and their fragments (nucleic acid sequences: AAX04311-X04410; amino acid sequences AAW78126-W78225) which are useful for preventing, treating or ameliorating medical conditions e.g. by protein or gene therapy. Also, pathological conditions can be diagnosed by determining the amount of the new polymucleotides. Specific uses are described for each of the 86 polymucleotides, based on which tissues they are most highly expressed in
                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                          New isolated human genes and the secreted polypeptides they encode useful for diagnosis and treatment of e.g. cancers, neurological disorders, immune diseases, inflammation or blood disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1999-080881/07.
N-PSDB; AAX04338.
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12-SEP-
12-SEP-
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                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 27; 380pp; English.
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12-SEP-1997
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12-SEP-1997
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Vi J, Olsen
                                                                                                   Conservative
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                                                                                                                                                                             for described uses).
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97US-0058971.
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97US-0049611.
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en HS, Rosen CA, Ruben SM,
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                                                                                                              Score 42; I
Pred. No. 7.
                                                                                                    Mismatches
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ben SM, Shi
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Y, Young P
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RRESULT 4
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AC AAW6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local :
                                                                                                                                           binding protein; serum; tie
glucose; secretion; blood;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
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infection;
                              WO9845427-A2
                                                                                    Synthetic.
                                                                                                                                                                                                                                                                                                                       02-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                AAW67541
                                                                                                                                                                                                                                                                                                                                                                                                                                 AAW67541 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABL00010 to ABL01104 represent human nucleic acid oligonucleotides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Isolated human nucleic acids comprising one or more single nucleotide polymorphisms, useful for treating a subject suffering from a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2001-355949/37
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                                                                                                                                                                                                    Inhibition;
                                                                                                                                                                                                                                                             IGF-1/IGFBP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   pathology,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              immunosuppressive; antiinflammatory; neuroprotective; antimicrobial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ű
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WINDQYDR 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WITDOYNK 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        polymorphism
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   e.g. autoimmune diseases, ascribed to the presence of a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        disease; inflammation; polymorphic protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14 AA;
                                                                                                                                    interaction; insulin-like growth factor; IGF; receptor;
tein; serum; tissue; insulin; plasma; growth hormone;
cretion; blood; hyperglycaemia; obesity.
                                                                                                                                                                                                                                                          inhibitory peptide bp1-11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                    (first entry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Leach M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9908-0167383.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             36.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                       14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 36; DB
Pred. No. 61;
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cancer; nervous system disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            diseases of sms. The SNPs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0,
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ARESULT 5
AAG63778
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to the isolation of compounds, especially coppides, that: (a) inhibit interaction between an insulin-like growth factor (IGF) with any one of its binding proteins (IGFBP), and (b) do not bind to a human IGF receptor (HIGFR), e.g. see AAM67476-W67491 and (C) AAM67503-W67565. The peptides are produced synthetically or are isolated from peptide libraries where the encoding sequence is generated so that the resulting peptide produced retains its structure in solution. This sequence represents a peptide which inhibits the interaction between IGF-1 and IGFBP. The compounds are used to increase serum and tissue levels of active IGF-1, preferably also to reduce insulin and plasma growth hormone (GH) secretion, and blood glucose levels, without direct stimulation of secretion or release of endogenous GH. Particularly the compounds are used to treat or prevent hyperglycaemia, obesity-related disorders, neurological, cardiac, anabolic, renal and immunological
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                   hyperglycemic disorder; obesity-related disorder; neurological disorder
cardiac disorder; anabolic disorder; renal disorder; neuroprotection;
immunological disorder; kidney regeneration; degenerative disorder;
hypoxia; wound healing; cardiac regeneration; cancer; angiogenesis;
                                                              31-MAR-1998;
                                                                                                                          26-JUN-2001
                                                                                                                                                                                                                                                 Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Insulin-like growth factor; IGF; IGF-1; IGF binding protein; IGFBP-1;
hyperglycemic disorder; obesity-related disorder; neurological disord
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic peptide which binds to IGF-1 binding protein IGFBP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAG63778;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAG63778 standard; peptide; 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 diseases.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             neurological disorders,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Inhibitors of interaction wasful for, e.g. treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1998-583196/49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-APR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-MAR-1998;
                                                                                                                                                                                      US6251865-B1
                                                                                                                                                                                                                                                                                                       osteoporosis;
                                                                                                                                                                                                                                                                                                                                      metabolic stress; growth hormone deficiency; diabetes;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    thiazolidinone
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15-OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (GETH ) GENENTECH INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         u
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 KDSLQWITDQY 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity 5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KGPLQWLCEKY 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Lowman HB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        97US-0825852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98WO-US06514.
                                                                 98US-0052888.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             34.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          on between insulin-like growth factor ng or preventing hyperglycaemia, obesi and are optionally formulated with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Robinson ICAF
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••
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 34; DB 19;
Pred. No. 1.2e+02;
3; Mismatches 3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              neurological disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                         short stature;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                obesity and
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04-APR-1997;

97US-0825852.

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RESULT 6
ABB57615
ID ABB5
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PR 15-N
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RET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cc obesity-related, neurological, cardiac, anabolic, renal or communication of the communicat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present sequence represents a synthetic peptide, which binds to an insulin-like growth factor (IGF)-1 binding protein. The specification describes IGF agonists. IGF agonist peptides are used to increase serum and tissue levels of IGF-1 in mammals with hyperglycemic,
                                                                           16-MAY-2000;
15-NOV-2000;
                                                                                                                                                                                                                                                                                                                                                                                      Antirheumatic; antiarthritic; osteopathic; cartilage disorder; insulin-like growth factor; IGF; binding protein; IGFBP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Isolated peptides used to increase serum and tissue levels insulin-like growth factor in those with hyperglycemic, obesity-related, neurological, cardiac, anabolic, renal or immunological disorders
                                                                                                                                                      16-MAY-2001; 2001WO-US15904.
                                                                                                                                                                                                                                                               WO200187323-A2
                                                                                                                                                                                                                                                                                                                   Synthetic
                                                                                                                                                                                                                                                                                                                                                                      rheumatoid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IGFBP-1 displacer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABB57615 standard; Peptide; 14 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
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                                                                                                                                                                                                            22-NOV-2001.
                             (GETH ) GENENTECH INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (GETH ) GENENTECH INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   . Similarity 5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KDSLOWITDOY 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KGPLOWLCEKY 13
                                                                                                                                                                                                                                                                                                                                                                   arthritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Lowman HB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14
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                                                                              2000US-204490P.
2000US-248985P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             34.3%;
45.5%;
                                                                                                                                                                                                                                                                                                                                                                      osteoarthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Robinson ICAF;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            #5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 34; DB 22; Length 14; Pred. No. 1.2e+02; 3; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             of.
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Best Local Similarity
Matches 5; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention relates to a method for treating cartilage disorders. The method comprises contacting cartilage with an active agent such as insulin-like growth factor (IGF-1) analog with a binding affinity preference for IGF binding protein-3 (IGFBP-3) over IGFBP-1, an IGF-1 analog with a binding affinity preference for IGFBP-1 over IGFBP-3, or a IGFBP displacer peptide that prevents the interaction of IGF with an IGFBP and does not bind to human IGF receptor. The method is useful for treating cartilage disorders (CD), including degenerative CD, articular CD such as rheumatoid arthritis and osteoarthritis. The present sequence
                                                                                                                                                                                                         CDV-1-42 and encoded polynucleotide, applicable in diagnosis and treatment of malignant tumuor, haemopathy, HIV infection, immuno diseases and inflammation -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; CDV-1-42; cytostatic; virucidal; immunomodulatory; HIV; antiinflammatory; haemostatic; malignant tumour; gene therapy; human immunodeficiency virus; infection; immunological disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                 WPI, 2002-025856/03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human CDV-1-42 peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAM51461 standard; peptide; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 13; Page 20; 136pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2002-082942/11.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29-MAR-2000; 2000CN-0115255.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26-MAR-2001; 2001WO-CN00534.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      was used to illustrate the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Treating cartilage disorders including cartilage damage by injury or degenerative cartilagemous disorders, by contacting cartilage with insulin-like growth factor analog with altered affinity for IGF-binding
                                                                                                                                                 Example 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200175061-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                       (BIOW-) BIOWINDOW GENE DEV INC SHANGHAI
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                                                                                                                                                 Page 13; 31pp; Chinese
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 34;
Pred. No.
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1.2e+02;
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The invention relates to human CDV-1-42 with cytostatic, virucidal, immunomodulatory, antiinflammatory and haemostatic activity. The protein and encoding polymucleotide are used in diagnosis and treatment of malignant tumour, haemopathy, human immunodeficiency virus (HIV)

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RESULT 8
AAU88219
ID AAU8
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                                                                        The invention relates to a method of modulating insulin activity in mammalian cells by administering a peptide that binds the insulin receptor (IR). A composition containing a peptide, optionally expressed from gene therapy vectors, that binds to Site 1 of IR and an insulin agonist are useful for treating diabetes. Also, peptides that are antagonists of the insulin-like growth factor-[IGF-1] receptor are useful for treating insulin-like growth factor (IGF) sensitive tumours (e.g. of prostate and breast) and diabetic retinopathy, while IGF-1 receptor agonists are useful for treating neurological diseases, including stroke and diabetic neuropathy. The peptides are also useful is screening for compounds that bind to IR or IGF-1 receptor, potential therapeutics and research reagents. AAU88034-AAU90957 represent IR and/or IGF-1 receptor-binding peptides and related amino acid sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ophthalmological; insulin; receptor; gene therapy; diabetes; insulin-like growth factor-1; IGF-1; tumour; prostate; breast; diabetic retinopathy; neurological diseases; stroke;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      04-OCT-2001.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Modulating insulin activity in mammalian cells,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2002-025774/03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Brissette R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Beasley J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29-MAR-2000; 2000WO-US08528
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 insulin-like growth factor receptors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Insulin/insulin-like growth factor receptor-binding peptide #183.
                                                             invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         w
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DGI BIOTECHNOLOGIES LLC. NOVO NORDISK AS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 and tumours,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DSLQWITDQYNKB 14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
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Spetzler J, Cheng
avera M, Hsiao K;
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Pred. No. 1.3e+02;
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Ostergaard S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ian cells, for treating e.g.
peptides that bind to insulin
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Matches Query Match

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Best Local S
Matches 5
                                                                                   The invention relates to a method of modulating insulin activity in mammalian cells by administering a peptide that binds the insulin receptor (IR). A composition containing a peptide, optionally expressed from gene therapy vectors, that binds to Site 1 of IR and an insulin agonist are useful for treating diabetes. Also, peptides that are antagonists of the insulin-like growth factor (IGP-1) receptor are useful for treating insulin-like growth factor (IGP-1) receptor are (e.g. of prostate and breast) and diabetic retinopathy, while IGF-1 receptor agonists are useful for treating neurological diseases, including stroke and diabetic neuropathy. The peptides are also useful screening for compounds that bind to IR or IGF-1 receptor, potential therapeutics and research reagents. ANUSB034-ANUSD57 represent IR and/or IGF-1 receptor-binding peptides and related amino acid sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cytostatic; antidiabetic; neuroprotective; cerebroprotective; ophthalmological; insulin; receptr; gene therapy; diabetes; insulin-like growth factor-1; IGF-1; tumour; prostate; breast; diabetic retinopathy; neurological diseases; stroke;
     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Figure 11B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Modulating insulin activity in mammalian cells, for treating e.g. diabetes and tumours, comprises using peptides that bind to insulin insulin-like growth factor receptors \, -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2002-025774/03.
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5; Conserva
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                                                           invention.
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Spetzler J, Cheng W,
avera M, Hsiao K;
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Ostergaard
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Brandt J;
, Mandecki WS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
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RESULT 11
AAB67004
ID AAB67
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AC AAB67
XX
DT 09-AF
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DE Humar
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AAG63978

AAG63978

AAG63978

AC AAG63

AC AAG64

AC AAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cc an influenza A virus. The gene comprises a functional RNA binding cc domain and a gene sequence modification after nucleotide position 400 cc of the NSI gene segment, counted on the basis of influenza A/PR/8/34 cc virus, where the modification bars transcription of the remaining cc portion of the NSI gene segment. The recombinant NS gene is used to produce a vaccine, which is useful for prophylactic or therapeutic cc application against a viral infection, preferably against influenza cc or HIV-1 infection. Influenza virus transfectants that contain the modified NS gene may have an interferon (IFN) inducing phenotype, but may or may not be sensitive towards to IFN. The present sequence cc comprising gp41 and IL-1beta peptides.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Recombinant NS gene of an influenza A virus comprising a functional binding domain and a gene sequence modification after nucleotide position 400 of the NSI gene segment, useful for producing a live
   Human insulin-like growth factor agonist peptide SEQ ID NO:
                                                                  09-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic.
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                                                                                                                             AAB67004;
                                                                                                                                                                                   AAB67004 standard; Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 1; Fig 2; 40pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                attenuated influenza virus vaccine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              02-MAR-2000; 2000EP-0104338
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13-NOV-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2001-514840/56.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (POLY-) POLYMUN SCI IMMUNOBIOLOGISCHE FORSCHUNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
nes 6; Conserva
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17 AA;
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                                                                  (first entry)
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                                                                                                                                                                                         14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 33; DB 22;
Pred. No. 2.2e+02;
4; Mismatches 4
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New peptide for increasing serum and tissue levels of biological active

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RESULT 12
AAB67006
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Best Local Similarity
Thes 4; Conserve
                                                                                                                                                                                                                                                                                                              Human; insulin-like growth factor; IGF; agonist; hyperglycaemic disorder; obesity; neurological disorder; cardiac disorder; renal disorder; immunological disorder; anabolic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention provides the sequences of a number of peptides which act as human insulin growth factor (IGP) agonists. These can be used in the treatment of hyperglycaemic, obssity-related, neurological cardiac, renal, immunological and anabolic disorders.
                                                                                                                                                                                                                                                                                                                                                                                             Human insulin-like growth factor agonist peptide SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                        09-APR-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAB67006 standard; Peptide; 14 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chen YM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; insulin-like growth factor; IGF; agonist; hyperglycaemic disorder; obesity; neurological disorder; cardiac disorder; renal disorder; immunological disorder; anabolic disorder.
WPI; 2001-112312/12.
                                                                                                                                                          19-JUN-2000; 2000WO-US17023.
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                                                                                                                     22-JUN-1999;
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                                                                                                                                                                                                                                                                            Homo sapiens.
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                                                                             (GETH ) GENENTECH INC
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                                    Cochran AG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cochran AG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14 AA;
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                                                                                                                     99US-0337227
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                                      Lowman HB,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 32;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        and tissue levels of biological active
                                      Skelton
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Skelton NJ;
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                                      N
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insulin growth factor

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RESULT 13
ABB57703
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 Query Match
Best Local Similarity
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                                                                    The present invention relates to a method for treating cartilage disorders. The method comprises contacting cartilage with an active agent such as insulin-like growth factor (IGF-1) analog with a binding affinity preference for IGF binding protein-3 (IGFBP-3) over IGFBP-1, an IGF-1 analog with a binding affinity preference for IGFBP-1 over IGFBP-3, or a IGFBP displacer peptide that prevents the interaction of IGF with an IGFBP and does not bind to human IGF receptor. The method is useful for treating cartilage disorders (CD), including degenerative CD, articular CD such as rheumatoid arthitis and osteoarthritis. The present sequence was used to illustrate the invention.
                                                                                                                                                                                                                                                                          Treating cartilage disorders including cartilage damage by injury or degenerative cartilagenous disorders, by contacting cartilage with insulin-like growth factor analog with altered affinity for IGF-binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Antirheumatic; antiarthritic; osteopathic; cartilage disorder; insulin-like growth factor; IGP; binding protein; IGFBP; rheumatoid arthritis; osteoarthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention provides the sequences of a number of peptides which act as human insulin growth factor (IGF) agonists. These can be used in the treatment of hyperglycaemic, obesity-related, neurological cardiac, renal, immunological and anabolic disorders.
                                            Sequence
                                                                                                                                                                                                                                 Example 12;
                                                                                                                                                                                                                                                                                                                                       WPI; 2002-082942/11.
                                                                                                                                                                                                                                                                                                                                                                  Dubaquie Y, Filvaroff EH,
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15-NOV-2000; 2000US-248985P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IGFBP-1
                                                                                                                                                                                                                                                                                                                                                                                               (GETH ) GENENTECH INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
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                                            14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14 AA;
                                                                                                                                                                                                                                 Page 87; 136pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
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32.3%;
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 Score 32;
Pred. No.
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 2.5e+02;
                DB 23;
               Length 14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
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ABBS7705
ID S7705
ID S7705
ID S7705
AC ABBS7
AC ABS7

RESULT 15
AAE02307
ID AAE02
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AC AAE02
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention relates to a method for treating cartilage disorders. The method comprises contacting cartilage with an active agent such as insulin-like growth factor (IGF-1) analog with a binding affinity preference for IGF binding protein-3 (IGFBP-3) over IGFBP-1, an IGF-1 analog with a binding affinity preference for IGFBP-1 over IGFBP-3, or a IGFBP displacer peptide that prevents the interaction of IGF with an IGFBP and does not bind to human IGF receptor. The method is useful for treating cartilage disorders (CD), including degenerative CD, articular CD such as rheumatoid arthritis and osteoarthritis. The present sequence
                                   AAE02307;
                                                                                      AAE02307 standard; peptide; 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16-MAY-2000; 2000US-204490P.
15-NOV-2000; 2000US-248985P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     was used to illustrate the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 12; Page 87; 136pp; English
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Search completed: January 21, Job time : 41 secs
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18-JUL-2000; 2000AU-0008842.
18-JUL-2000; 2000AU-0008844.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention relates to immunogenic proteins, referred as Bt allergen, is derived from domestic mite, Blomia tropicalis. The specific Bt allergens of the invention includes Bt11, Bt10, Bt5 and BtA2. The immunogenic protein is useful for preventing, reducing or ameliorating Blomia tropicalis hypersensitivity condition such as atopic dermatitis, immediate hypersensitivity, systemic anaphylaxis, allergic rhinitis or asthma and for modulating an immune response directed to Bt allergen in a subject. The Bt allergens are also useful for detecting antibody directed to all or a part of Bt allergen in a biological sample from a subject. Antibodies to Bt allergens are also used as therapeutic or diagnostic agents, to screen Bt immunoassays and as antagonists to inhibit Bt activity under circumstances where temporary hypersensitivity inhibition is required. The present sequence is Bt5 allergen
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel immunogenic protein derived from house mite, Blomia tropicalis useful for treating and diagnosing conditions involving induction of immuneresponse to mite, such as allergic asthma, atopic dermatitis,
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2; Mismatches 1; Indels
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l: /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep:*
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/cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*
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Copyright (c) 1993 - 2004 Compugen Ltd.
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US-09-858-935B-132
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Sequence 7, Appli
Sequence 30, Appl
Sequence 1200, Ap
Sequence 1756, Ap
Sequence 1756, Ap
Sequence 1756, Ap
Sequence 12, Appl
Sequence 132, App
Sequence 134, App
Sequence 1752, Ap
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Patent No. US20020142396A1
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cancerner	p a	100	1,0	æ	e 713	,	e 135,	54,	e 52,	53,	e 10,	145,	14	e 144,	e 319,	e 411,	4,	e 15,	Sequence 104, App	133,	39,	41,	Sequence 57, Appl	26,	e 133,	131,	æ	35,	34,

ALIGNMENTS

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NESULT 2
US-09-858-935B-30
VS-09-858-935B-30
Sequence 30, Application US/09858935B
Sequence 30, Application US/09858935B
Publication No. US20030069177A1
                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQ ID NOS: 19
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 7
LENGTH: 18
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
APPLICANT: ZymoGenetics, Inc.
TITLE OF INVENTION: Mammalian Cystatin-8 and Its Use to
TITLE OF INVENTION: Inhibit Cancer Procoagulant Protein
FILE REFERENCE: 00-81PC
                                                                  GENERAL INFORMATION:
APPLICANT: Dubaquie, Yves
APPLICANT: Filvaroff, Ellen
APPLICANT: Lowman, Henry B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/09/941,314
CURRENT FILING DATE: 2001-08-29
PRIOR APPLICATION NUMBER: 60/230,230
PRIOR FILING DATE: 2001-09-01
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                                                                                                                                                                                                                       1 KDSLOWITDQYNKESDDK 18
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TITLE OF INVENTION: METHOD FOR TREATING CARTILAGE DISORDERS

FILE REFERENCE: P1794R1

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APPLICANT: GOLDSTEIN, NEIL I.
APPLICANT: SPETZLER, JANE
APPLICANT: STERGAARD, SOREN
APPLICANT: OSTERGAARD, SOREN
APPLICANT: HANSEN, PER HERTZ
ITITLE OF INVENTION: INSULIN AND IGF-1 RECEPTOR AGONISTS AND ANTAGONISTS
FILE REFERENCE: 1878-4051US1
CURRENT APPLICATION NUMBER: US/09/962,756
CURRENT FILING DATE: 2001-09-24
PRIOR APPLICATION NUMBER: 09/558,038
PRIOR FILING DATE: 2000-03-29
PRIOR FILING DATE: 2000-03-29
PRIOR FILING DATE: 1998-09-02
NUMBER OF SEQ ID NOS: 2227
SOPTWARE: Patemtin Ver. 2:1
SEQ ID NO 1200
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CURRENT FILING DATE: 2002-07-02
PRIOR APPLICATION NUMBER: US 60/248,985
PRIOR FILING DATE: 2000-11-15
PRIOR APPLICATION NUMBER: US 60/204,490
PRIOR FILING DATE: 2000-05-16
NUMBER OF SEQ ID NOS: 153
SEQ ID NO 30
EINCTH: 14
US-09-962-756-1756

Sequence 1756, Application US/09962756

Publication No. US20030195147A1

GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                             ; OTHER INFORMATION: Description of Artificial Sequence: Synthetic; OTHER INFORMATION: peptide
US-09-962-756-1200
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Best Local Similarity
Similarity
Similarity
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APPLICANT: BRISSETTE, RENEE
APPLICANT: BLUME, ARTHUR J.
APPLICANT: SCHAFFER, LAUGE
APPLICANT: BRANDT, JAKOB
                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Artificial sequence FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                                    ENGTH: 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity 45.9 hes 5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION:
                                                                                                                                         10 WFADQYKK 17
                                                                                                                                                                            6 WITDQYNK 13
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                                                                                                                                                                                                                     Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           34.3%;
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Pred. No. 1.9e+02;
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Pred. No. 1.5e+02;
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Best Local Similarity
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APPLICANT: HANSEN, PER HERTZ
TITLE OF INVENTION: INSULIN AND IGF-1 RECEPTOR AGONISTS AND ANTAGONISTS
FILE REFERENCE: 1878-4051US1
CURRENT APPLICATION NUMBER: US/09/962,756
CURRENT FILING DATE: 2001-09-24
PRIOR APPLICATION NUMBER: 09/538,038
PRIOR APPLICATION NUMBER: 09/538,038
PRIOR FILING DATE: 2000-03-29
PRIOR APPLICATION NUMBER: 09/146,127
PRIOR APPLICATION NUMBER: 09/146,127
PRIOR PILING DATE: 1998-09-02
NUMBER OF SEQ ID NOS: 2227
SOPTWARE: Patentin Ver. 2.1
SEQ ID NO 1756
                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: 09/538,038
PRIOR FILING DATE: 2000-03-29
PRIOR APPLICATION NUMBER: 09/146,127
PRIOR FILING DATE: 1998-09-02
NUMBER OF SEQ ID NOS: 2227
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 1200, Application US/10253471 Publication No. US20030236190A1 GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/10/253,471
CURRENT FILING DATE: 2002-09-24
PRIOR APPLICATION NUMBER: 09/962,756
PRIOR FILING DATE: 2001-09-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILE REFERENCE: 1878-4057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: PILLUTLA, RENUKA TITLE OF INVENTION: INSULIN
                                                                                                                                                 PEATURE:
OTHER INFORMATION: Description
OTHER INFORMATION: peptide
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TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Artificial Sequence FEATURE:
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                                                                                                                                                                                                                                                           ENGTH:
10 WFADQYKK 17
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                                    6 WITDQYNK 13
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SPETZLER, JANE
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BLUME, ARTHUR J.
                                                                        Conservative
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INSULIN AND IGF-1 RECEPTOR AGONISTS AND ANTAGONISTS
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Pred. No. 1.9e+02
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Pred. No. 1.9e+02;
                                                                                                                                                                                  of Artificial Sequence: Synthetic
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US-10-283-838-12
Sequence 12, Application US/10283838
Diblication No. US20030092894A1
GENERAL INFORMATION:
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: PILLUTIA, RENUKA et al.
TITLE OF INVENTION: INSULIN AND IGF-1 RECEPTOR AGONISTS AND ANTAGONISTS
FILE REFERENCE: 1878-4057
CURRENT APPLICATION NUMBER: US/10/253,471
CURRENT FILING DATE: 2002-09-24
PRIOR APPLICATION NUMBER: 09/962,756
PRIOR FILING DATE: 2001-09-24
PRIOR FILING DATE: 2001-09-24
PRIOR APPLICATION NUMBER: 09/538,038
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PRIOR APPLICATION NUMBER: 09/146,127
PRIOR FILING DATE: 1998-09-02
NUMBER OF SEQ ID NOS: 2227
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les 5; Conserv
                                                                                                                                                                                                   COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PStentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/283,838
FILING DATE: 30-Oct-2002
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
                                                                                  APPLICATION NUMBER: US/08/695,692
FILING DATE: AUGUSE 12, 1996
APPLICATION NUMBER: 9601245-5
FILING DATE: MARCH 29, 1996
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                        ZIP: 77027-9095
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Per Antonsson, Per Bjork, Mikael Dohlsten,
Johan Hansson, Terje Kalland, Lars
Abrahmsen and Goran Forsberg
TITLE OF INVENTION: MODIFIED/CHIMERIC SUPERANTIGENS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 24 CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE: Pravel, Hewitt, Kimball & Krieger STREET: 1177 West Loop South, 10th Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CITY: Houston
                                           REGISTRATION NUMBER:
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nilarity 62.5%;
Conservative (
NOCKET NUMBER: 410
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Pred. No. 1.9e+02;
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SEQ ID NO 132
                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                     Sequence 134, Application US/09858935B Publication No. US20030069177A1
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Best Local Similarity
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APPLICANT: Filvaroff, Ellen
APPLICANT: Lowman, Henry B.
TITLE OF INVENTION: METHOD FOR TREATING CARTILAGE DISORDERS
                                                     FILE REFERENCE: P1794R1
CURRENT APPLICATION NUMBER: US/09/858,935B
CURRENT FILING DATE: 2002-07-02
PRIOR APPLICATION NUMBER: US 60/248,985
PRIOR FILING DATE: 2000-11-15
                PRIOR APPLICATION NUMBER: US 60/204,490 PRIOR FILING DATE: 2000-05-16
                                                                                                                                                                          APPLICANT: Dubaquie, Yves
APPLICANT: Filvaroff, Ellen
APPLICANT: Lowman, Henry B.
                                                                                                                                                      APPLICANT: Lowman, Henry B.
TITLE OF INVENTION: METHOD FOR TREATING CARTILAGE DISORDERS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILE REFERENCE: P1794R1
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INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OTHER INFORMATION: Sequence is synthesized
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Artificial sequence
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SEQUENCE DESCRIPTION: SEQ ID NO: 12:
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                                                                                                                                                                                                                                                                                                                                                                              5 ALOWLCEKY 13
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ID NOS: 153
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Pred. No. 2.1e+02;
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Pred. No. 3e+02;
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APPLICANT: OSTERGAARD, SORRN
APPLICANT: HANSEN, PER HERTZ
TITLE OF INVENTION: INSULIN AND IGF-1 RECEPTOR AGONISTS AND ANTAGONISTS
FILE REFERENCE: 1878-4051US1
CURRENT APPLICATION NUMBER: US/09/962,756
CURRENT FILING DATE: 2001-09-24
PRIOR APPLICATION NUMBER: 09/538,038
PRIOR APPLICATION NUMBER: 09/538,038
PRIOR APPLICATION NUMBER: 09/146,127
PRIOR APPLICATION NUMBER: 09/146,127
PRIOR PILING DATE: 1998-09-02
NUMBER OF SEQ ID NOS: 2227
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 1752
LENGTH: 17
TYPE: PRT
ORGANTS:
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                                                                                                                                                                                                                                                                                                          US-10-253-471-1752
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                                                                                                                                                                         Sequence 1752, Application US/10253471
publication No. US20030236190A1
GENERAL INFORMATION:
APPLICANT: PILLUTLA, RENUKA et al.
TITLE OF INVENTION: INSULIN AND IGF-1 RECEPTOR AGONISTS AND ANTAGONISTS
FILE REFERENCE: 1878-4057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 32.3%;
Best Local Similarity 44.4%;
Matches 4; Conservative
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Best Local
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PRIOR APPLICATION NUMBER: 09/962,756
PRIOR FILING DATE: 2001-09-24
PRIOR APPLICATION NUMBER: 09/538,038
PRIOR FILING DATE: 2000-03-29
PRIOR APPLICATION NUMBER: 09/146,127
PRIOR FILING DATE: 1998-09-02
                                                                                                                              CURRENT APPLICATION NUMBER: US/10/253,471
CURRENT FILING DATE: 2002-09-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: PILLUTLA, RENUKA
APPLICANT: BRISSETTE, RENEE
APPLICANT: BLUME, ARTHUR J.
APPLICANT: SCHAFFER, LAUGE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
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Similarity 40.0%;
4; Conservative
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Pred. No. 3.6e+02
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Pred. No. 3e+02;
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Best Local S
Matches 6
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CURRENT APPLICATION NUMBER: US/09/884,696
CURRENT FILING DATE: 2001-06-19
NUMBER OF SEQ ID NOS: 41
SOPTWARE: Patentin Ver. 2.1
SEQ ID NO 8
                    SOFTWARE: PatentIn version 3.1
SEQ ID NO 81
LENGTH: 13
                                                                                                                                                                                                                                                                                                                     Sequence 81, Application US/09897107
Patent No. US20020137094A1
GENERAL INFORMATION:
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APPLICANT: GEORGE, LISLE
APPLICANT: ANGELOS, JOHN
APPLICANT: HESS, JOHN F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQ ID NOS: 2227
SOFTWARE: PatentIn Ver. 2.
SEQ ID NO 1752
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Best Local Similarity 40.0%;
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                                                                                               APPLICATE YAMAGISHI, AKIHIKO
APPLICANT YAMAGISHI, AKIHIKO
TITLE OF INVENTION: METHOD FOR IMPROVING THERMOSTABILITY OF PROTEINS, PROTEINS HAVING
TITLE OF INVENTION: THERMOSTABILITY IMPROVED BY THE METHOD AND NUCLEIC ACIDS ENCODING
FILE REFERENCE: 210388US0
CURRENT APPLICATION NUMBER: US/09/897,107
CURRENT FILING DATE: 2001-07-03
PRIOR APPLICATION NUMBER: JP2000-201920
PRIOR APPLICATION NUMBER: JP2001-164332
PRIOR APPLICATION NUMBER: JP2001-164332
PRIOR FILING DATE: 2001-05-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: MORAXELLA BOVIS CYTOTOXIN, CYTOTOXIN GENE, ANTIBODIES TITLE OF INVENTION: AND VACCINES FOR PREVENTION AND TREATMENT OF MORAXELLA TITLE OF INVENTION: BOVIS INFECTIONS
                                                                                  NUMBER OF SEQ ID NOS: 104
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TYPE: PRT
ORGANISM: Escherichia coli
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FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Synthetic
OTHER INFORMATION: peptide
TYPE: PRT
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Pred. No. 3.6e+02;

No. 3.6e+02;
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Pred. No. 3.6e+02;
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; ORGANISM: Bos Taurus
US-09-897-107-81

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APPLICANT: Dubaquie, Yves
APPLICANT: Filvaroff, Ellen
APPLICANT: Filvaroff, Ellen
APPLICANT: Lowman, Henry B.
TITLE OF INVENTION: METHOD FOR TREATING CARTILAGE DISORDERS
FILE REFERENCE: P1794R1
CURRENT APPLICATION NUMBER: US/09/858,935B
CURRENT FILING DATE: 2002-07-02
PRIOR APPLICATION NUMBER: US 60/248,985
PRIOR APPLICATION NUMBER: US 60/248,985
PRIOR APPLICATION NUMBER: US 60/204,490
PRIOR APPLICATION NUMBER: US 60/204,490
IPRIOR PILING DATE: 2000-05-16
NUMBER OF SEQ ID NOS: 153
SEQ ID NO 31
LENGTH: 14
TYPE: PRT
ORGANISM: Artificial sequence
FEATURE:
COURT INFORMATION: General Section of Control 
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| Publication No. US20030069177A1
| GENERAL INFORMATION:
| APPLICANT: Dubaquie, Yves
| APPLICANT: Dubaquie, Yves
| APPLICANT: Lowman, Henry B.
| TITLE OF INVENTION: METHOD FOR TREATING CARTILAGE DISORDERS
| FILE REFERENCE: P194R1
| CURRENT APPLICATION NUMBER: US/09/858,935B
| CURRENT FILING DATE: 2002-07-02
| PRIOR APPLICATION NUMBER: US 60/248,985
| PRIOR PILING DATE: 2000-11-15
| PRIOR APPLICATION NUMBER: US 60/204,490
| PRIOR PILING DATE: 2000-05-16
| NUMBER OF SET TO NOTE: 1820
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SEQ ID NO 29
LENGTH: 14
TYPE: PRT
ORGANISM: Artificial sequence
FEATURE:
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US-09-858-935B-31
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                                                                                                                                                                     ; OTHER INFORMATION: Sequence is synthesized US-09-858-935B-31
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Query Match 31.3%; Score 31; DB 11; Length 14; Best Local Similarity 50.0%; Pred. No. 4.2e+02; Matches 4; Conservative 3; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 31, Application US/09858935B Publication No. US20030069177A1 GENERAL INFORMATION:
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Best Local Similarity 46.2%;
Matches 6; Conservative
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Best Local Similarity 45.5%;
Matches 5; Conservative
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Pred. No. 3.9e+02;
2; Mismatches 5; Indels
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Qy 4 LQWITDQY 11
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Db 6 LQWLCEKY 13
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Search completed: January 21, 2004, 12:25:09 Job time : 32 secs

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Post-processing: Minimum Match 0%
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Listing first 45 summaries
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Maximum DB seq length: 18
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34.618 Million cell updates/sec
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1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*

2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*

3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*

4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*

5: /cgn2_6/ptodata/1/iaa/FCTUS_COMB.pep:*

6: /cgn2_6/ptodata/1/iaa/backfIles1.pep:*
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                         WS-09-052-888-85
WS-09-337-227C-4
WS-09-337-227C-6
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WS-09-052-888-89
WS-09-052-888-89
WS-09-052-888-90
WS-09-052-888-90
WS-09-052-888-90
WS-09-052-888-91
WS-09-052-888-91
WS-09-052-888-91
WS-09-337-227C-38
WS-09-337-227C-38
WS-09-337-227C-38
WS-09-052-888-15
WS-09-052-888-100
WS-09-052-888-73
WS-09-052-888-30
                                                      Sequence 85, Appl Sequence 12, Appli Sequence 4, Appli Sequence 6, Appli Sequence 81, Appli Sequence 81, Appli Sequence 86, Appli Sequence 96, Appli Sequence 97, Appli Sequence 37, Appli Sequence 31, Appli Sequence 15, Appli Sequence 15, Appli Sequence 115, Appli Sequence 110, Appli Sequence 100, Appli Sequence 216, Appli Se
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US-09-052-888-85
RESULT 2
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Best Local
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3 KGPLQWLCBKY 13
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Result No.

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	28.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3
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ALIGNMENTS	US-08-616-855-10	US-09-418-780A-7	US-09-337-227C-36	US-09-337-227C-34	US-09-337-227C-35	US-09-337-227C-44	US-09-337-227C-45	US-09-337-227C-43	US-09-459-958-4	US-09-418-780A-15	PCT-US95-09262-104	PCT-US95-00656-216	PCT-US95-00498-216	US-09-217-352-133	US-09-224-480-216	US-08-657-162-216	US-09-119-263-216	US-08-621-259A-104
	Sequence 10, Appl	Sequence 7, Appli	Sequence 36, Appl		Sequence 35, Appl	•	•		Sequence 4, Appli		Sequence 104, App		Sequence 216, App		•			

Sequence:

Title:

Run on:

Sequence 85, Applicati Patent No. 6251865 GENERAL INFORMATION: APPLICANT: Clark, TELEFAX: 650/952-9881 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS: LENGTH: 14 amino acids COMPUTER READABLE FORM: MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOPTWARE: WinPatin (Genentech) CURRENT APPLICATION DATA; APPLICANT: Lowman, Henry B. APPLICANT: Robinson, Iain C.A.F. TITLE OF INVENTION: Insulin-like Growth Factor Agonist Molecules NUMBER OF SEQUENCES: 109 APPLICATION NUMBER: US/09/052,888 FILING DATE: 31-Mar-1998 CLASSIFICATION: 514 ATTORNEY/AGENT INFORMATION: NAME: Hasak, Janet E. REGISTRATION NUMBER: 28,616 REGISTRATION NUMBER: 28,616 REFERENCE/DOCKET NUMBER: P1 TELECOMMUNICATION INFORMATION: CORRESPONDENCE ADDRESS: 34.3%; Local Similarity 45.5%; les 5; Conservation LENGTH: 14 amino acids TYPE: Amino Acid ZIP: 94080 TELEPHONE: 650/225-1896 South San Francisco California Application US/09052888 1 DNA Way USA Linear Genentech, Inc. 3; Mismatches P1071P1 Score 34; DB 3; Pred. No. 34; Length 14; 0 Gaps

Sequence 12,

Application US/08695692B

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US-09-337-227C-4
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APPLICANT: Chen, Yvonne May-Yee APPLICANT: Clark, Ross G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
          CURRENT APPLICATION NUMBER: US/09/337,227C CURRENT FILING DATE: 1999-06-22 PRIOR APPLICATION NUMBER: US 09/052,888 PRIOR FILING DATE: 1998-03-31 PRIOR APPLICATION NUMBER: US 08/825,852 PRIOR FILING DATE: 1997-04-04
                                                                                                                                   APPLICANT: Cochran, Andrea G.
APPLICANT: Robinson, Isin C.A.F.
APPLICANT: Robinson, Isin C.A.F.
APPLICANT: Skelton, Nicholas J.
TITLE OF INVENTION: INSULIN-LIKE GROWTH FACTOR AGONIST MOLECULES
FILE REFERENCE: P1071P2.rev
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CLASSIFICATION: 530
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/695,69
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MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
ADDRESSEE: Pravel, Hewitt, Kimball & Krieger
STREET: 1177 West Loop South, 10th Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Per Antonsson, Per Bjork, Mikael Dohlsten, APPLICANT: Johan Hansson, Terje Kalland, Lars APPLICANT: Abrahmsen and Goran Forsberg TITLE OF INVENTION: MODIFIED/CHIMERIC SUPERANTIGENS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: Krieger, Paul E.
REGISTRATION NUMBER: 25,886
REFERENCE/DOCKET NUMBER: 41
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 9601245
FILING DATE: March 29, 1996
ATTORNEY/AGENT INFORMATION:
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STREET: ...
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SEQ ID NOS:
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; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE: INFORMATION: Sequence is synthesized
; Patent No. 6420518
US-09-337-227C-4
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; OTHER INFORMATION: Sequence is synthesized;
; Patent No. 6420518
US-09-337-227C-6
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US-09-155-941-19
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GENERAL INFORMATION:
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SEQ ID NO 6
LENGTH: 14
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Best Local Similarity
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CURRENT APPLICATION UNDER: US/09/337,227C
CURRENT FILING DATE: 1999-06-22
PRIOR APPLICATION NUMBER: US 09/052,888
PRIOR FILING DATE: 1998-03-31
PRIOR FILINGTON NUMBER: US 08/825,852
PRIOR PILING DATE: 1997-04-04
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APPLICANT: Skelton, Nicholas J.
TITIE OF THE TRANSPORT OF 
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                                                                                                                                                                                                                                                                      GROTZINGER, Joachim
TITLE OF INVENTION: IL-6 MUTEIN
NUMBER OF SEQUENCES: 23
                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: BROWDY AND NEIWARK
STREET: 624 Ninth Street, N.W., Suite 300
                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: EHLERS, Marc
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STATE: D.C.
COUNTRY: USA
ZIP: 20001
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                                                                                                                       CITY: Washington
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Pred. No. 68;
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Pred. No.
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Bd
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Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Patent No. 6251865
GENERAL INFORMATION:
             CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/052,888
APPLICATION NUMBER: US/09/052,888
FILING DATE: 31-Mar-1998
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: Hasak, Janet E.
REGISTRATION NUMBER: 28,616
REFERENCE/DOCKET NUMBER: P1071P1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-1896
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: EHLERS=1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-628-5197
TELEPHONE: 202-737-3528
INFORMATION FOR SEQ ID NO: 19:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Clark, Ross Gl
APPLICANT: Lowman, Henry B.
APPLICANT: Robinson, Iain C.A.F.
TITLE OF INVENTION: Insulin-like Growth Factor Agonist Molecules
NUMBER OF SEQUENCES: 109
                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                               CITY: South San Francisco
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                              STREET:
                                                                                                                                                                                                                                                                                                                                                                COUNTRY:
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PILING DATE: 09-APR-1996
ATTORNEY/AGENT INFORMATION:
NAME: YUN, Allen C.
REGISTRATION NUMBER: 37,971
REGISTRATION NUMBER: 37,971
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/09/155,941
FILING DATE: 06-Apr-1999
CLASSIFICATION: Unknown>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE: peptide SEQ ID NO: 19:
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TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Application US/09052888
                                                                                                                                                                                                                                                                                                                                                                                                                                1 DNA Way
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650/952-9881
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Seque....
Patent No. 625100:

GENERAL INFORMATION:

GENERAL INFORMATION:

APPLICANT: Clark, Ross Gl

APPLICANT: Robinson, Henry B.

APPLICANT: Robinson, Iain C.A.F.

APPLICANT: Robinson, Iain C.A.F.

TTTLE OF INVENTION: Insulin-like Growth Factor Agonist Molecules
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Best Local Similarity
Watches 4; Conserve
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                                                                                                                                                                                                    RESULT 8
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Patent No. 6
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Matches 5; Conserv
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MEDIUM TYPE: 3.5 inch, 1.44 Mb fl
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatin (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/052,888
FILING DATE: 31-Mar-1998
CLASSIFICATION: 514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
APPLICANT: Clark, Ross Gl
APPLICANT: Lowman, Henry B.
APPLICANT: Robinson, Iain C.A.F.
TITLE OF INVENTION: Insulin-like Growth Factor Agonist Molecules
NUMBER OF SEQUENCES: 109
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: 650/952-9881
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELECOMMUNICATION INFORMATION: 650/225-1896
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
NAME: HaBak, Janet B.
REGISTRATION NUMBER: 28,6
REFERENCE/DOCKET NUMBER:
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TYPE: A
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CITY: South San Francisco
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Amino Acid
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                                                                                                                                                                     Application US/09052888
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45.5%;
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                                                                                                                                                                                                                                                                                                                                Score 31;
Pred. No.
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Pred. No.
                                                                                                                                                                                                                                                                                                                    Mismatches
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. 97;
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97;
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CORRESPONDENCE ADDRESS:

ADDRESSEE:

Genentech,

STREET: 1 DNA Way
CITY: South San Francisco

California

COUNTRY:

USA

94080

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US-09-052-888-90
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             CORTWARE: Windatin (Genenech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/052,888
FILING DATE: 31-Mar-1998
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: Hasak, Janet E.
REGISTRATION NUMBER: 28,616
REFERENCE/DOCKET NUMBER: p1071P1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/252-9881
                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
APPLICANT: Clark, Ross Gl
APPLICANT: Lowman, Henry B.
APPLICANT: Robinson, Iain C.A.F.
APPLICANT: Robinson, Insulin-like Growth Factor Agonist Molecules
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE: 650/225-1896
TELEFAX: 650/952-9881
INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
TELEFAX: 650/952-9881 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatin (Genentech)
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTORNEY/AGENT INFORMATION:
NAME: Hasak, Janet E.
REGISTRATION NUMBER: 28,616
REFERENCE/DOCKET NUMBER: P10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: Amino Acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/09/052,888 FILING DATE: 31-Mar-1998 CLASSIFICATION: 514
                                                                                                                                                                                                                                                                                                                                                                             CITY: South San Francisco
                                                                                                                                                                                                                                                                                                                                                                                              STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                  COUNTRY:
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ilarity 50.0%;
Conservative
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; Pred. No. 97;
3; Mismatches
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Sequence 5, Application US/09337227C Patent No. 6420518

GENERAL INFORMATION:

APPLICANT: Chen, Yvonne May-Yee

APPLICANT:

Clark, Ross G. Cochran, Andrea G. Lowman, Henry B.

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RESULT 10
US-09-052-888-96
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RESULT 11
US-09-337-227C-5
                                                                                                                                                                                         TOPOLOGY: US-09-052-888-96
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 50.0
                                                                                                                          Query Match 31.3%;
Best Local Similarity 50.0%;
Matches 4; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sequence 96, Application US/09052888 Patent No. 6251865
                                                                                                                                                                                                                                                                    TELEFAX: 650/952-9881
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: WinPatin (Genentech) CURRENT APPLICATION DATA: APPLICATION NUMBER: US/09/052,888 FILING DATE: 31-Mar-1998 CLASSIFICATION: 514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: Amino acide
TOPOLOGY: Line
                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
TYPE: Amino Acid
                                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
NAME: Hasak, Janet E.
REGISTRATION NUMBER: 28,616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ZIP: 94080
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Lowman, Henry B.
APPLICANT: Robinson, Iain C.A.F.
TITLE OF INVENTION: Insulin-like Growth Factor Agonist Molecules
                                                                                                                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-1896
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES: 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET: 1 DNA Way
CITY: South San Francisco
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY:
                                                                                                                                                                                                                                                                                                   TELEPHONE:
                                                                                                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER:
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                                                                                            4 LOWITDOY 11
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                                                                                                                                                                                                         Linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Genentech, Inc.
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                                                                                                                           Score 31; DB
Pred. No. 97;
3; Mismatches
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Pred. No. 97;
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APPLICANT: Chen, Yvonne May-Yee
APPLICANT: Clark, Ross G.
APPLICANT: Cochran, Andrea G.
APPLICANT: Lowman, Henry B.
APPLICANT: Lowman, Henry B.
APPLICANT: Robinson, Iain C.A.F.
APPLICANT: Skelton, Nicholas J.
TITLE OF INVENTION: INSULIN-LIKE GROWTH FACTOR AGONIST MOLECULES, FILE REFERENCE: P1071P2.rev
CURRENT APPLICATION NUMBER: US/09/337,227C
CURRENT FILING DATE: 1999-06-22
PRIOR APPLICATION NUMBER: US 09/052,888
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                                                                              RESULT 13
US-09-337-227C-38
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                                                                                                                                                                                                                                                                                                                                         ; OTHER INFORMATION: Sequence is synthesized ; Patent No. 6420518 US-09-337-227C-37
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OTHER INFORMATION: Sequence is synthesized; Patent No. 6420518
US-09-337-227C-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 12
                    Sequence 38, Application US/09337227C Patent No. 6420518 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 51
SEQ ID NO 37
LENGTH: 14
                                                                                                                                                                                                                                                      Query Match 31.3%;
Best Local Similarity 50.0%;
Matches 4; Conservative
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Best Local Similarity 50.0%;
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FITLE OF INVENTION: INSULIN-LIKE GROWTH FACTOR AGONIST MOLECULES
FILE REPERENCE: P1071P2.rev
CURRENT APPLICATION NUMBER: US/09/337,227C
CURRENT FILING DATE: 1999-06-22
PRIOR APPLICATION NUMBER: US 09/052,888
PRIOR PILING DATE: 1998-03-31
PRIOR PILING DATE: 1998-03-31
PRIOR PILING DATE: 1997-04-04
APPLICANT: Chen, Yvonne May-Yee
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: PRT
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Pred. No. 97;
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No. 612141
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SEQ ID NO 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/09/337,227C CURRENT FILING DATE: 1999-06-22 PRIOR APPLICATION NUMBER: US 09/052,888 PRIOR FILING DATE: 1998-03-31 PRIOR APPLICATION NUMBER: US 08/825,852 PRIOR FILING DATE: 1997-04-04
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APPLICANT: Skelton, Nicholas J.
TITLE OF INVENTION: INSULIN-LIKE GROWTH FACTOR AGONIST MOLECULES
FILE REFERENCE: P1071P2.rev
                                                TELEFAX: 650/952-9881
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS
                                                                                                      ATTORNEY/AGENT INFORMATION:
NAME: Hasak, Janet B.
REGISTRATION NUMBER: 28,616
REFERENCE/DOCKET NUMBER: P10
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-1896
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION: APPLICANT: Clark,
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TYPE: PRT
ORGANISM: Artificial sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Lowman, Henry B.
APPLICANT: Robinson, Iain C.A.F.
TITLE OP INVENTION: Insulin-like Growth Factor Agonist Molecules
NUMBER OF SEQUENCES: 79
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOCTWARE: WinPatin (Genentech)
CURRENT APPLICATION DATA:
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COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET: 1 DNA wa
               TYPE: Amino Acid
                                                                                                                                                                                                                  APPLICATION NUMBER: US/08/825,852 FILING DATE: 04-Apr-1997 CLASSIFICATION: 514
TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE: Genentech, Inc.
STREET: 1 DNA Way
                                ENGTH:
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Lowman, Henry B.
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Query Match

31.3%; Score 31;

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Length 15;

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COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatin (Genentech)

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/052,888

FILING DATE: 31-Mar-1998

CLASSIFICATION: 11FORMATION:
NAME: Hasak, Janet E.
REGISTRATION NUMBER: P1071P1

TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-1896

TELEPHONE: 650/952-9881

INFORMATION FOR SEQ ID NO: 15:
SEQUENCE CHARACTERISTICS:
LENGTH: 15 amino acids
TOPOLOGY: Linear

US-09-052-888-15
Search completed: January 21, 2004, 12:20:51 Job time: 22 secs
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US-09-052-888-15
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Best Local Similarity 50.0%;
Matches 4; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
APPLICANT: Clark, Ross Gl
APPLICANT: Lowman, Henry B.
APPLICANT: Robinson, Tain C.A.F.
APPLICANT: Robinson, Insulin-like Growth Factor Agonist Molecules
NUMBER OF SEQUENCES: 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE: Genentech, Inc.
STREET: 1 DNA Way
CITY: South San Francisco
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: US
                                                                             6 LOWLCEKY 13
                                                                                            4 LQWITDQY 11
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Title:
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Maximum DB
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                            Pred. No. is the number of results predicted by chance to have score greater than or equal to the score of the result being pu and is derived by analysis of the total score distribution.
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length: 2000000000
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Listing first 45 summaries
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SUMMARIES
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The invention describes an isolated mammalian cystatin-8 (Zcys8) polypeptide (I). (I) is useful for: inhibiting cancer proceagulant protein in an individual and thus inhibiting the thrombotic events associated with cancer; promoting spermatogenesis, modulating seminal fluid viscosity, enhancing viability of cryopreserved sperm, sperm motility and fertilisation; and as antigenic peptides to generate antibodies. Zcys8 is useful as research reagent for characterising sites of interaction between Zcys8 and its receptor. Zcys8 is useful in enhancing fertilisation during assisted reproduction in humans and in animals. Anti-(I) antibodies are useful to screen biological samples like blood, urine, saliva, tissue biopsy and autopsy material in vitro for the presence of Zcys8. The antibodies are also useful to isolate large

Novel isolated mammalian cystatin-8 polypeptide useful for promoting spermatogenesis, and inhibiting cancer procoagulant protein which leads to inhibition of thrombotic events associated with cancer.

WPI; 2002-383044/41.

Claim 2; Page 96; 100pp; English.

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77	77	77	77	77	77	77	77	78	79	82	82	82	82	82	82	82	82	82	82
41.2	41.2	41.2	41.2	41.2	41.2	41.2	41.2	41.7	42.2	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9
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ADA14374	AAE04433	AAE02404	AAW78153	ADD38088	ADC74577	ADA41457	ADA57563	AAW78259	ABP41476	ADD46710	ADD46706	ADD37980	ADC74335	ADA41112	ADA57231	AAE04434	AAE02405	AAW78258	AAW78260
Ada14374	Aae04433	Aae02404	Aaw78153	Add38088	Adc74577	Ada41457	Ada57563	Aaw78259	Abp41476	Add46710	Add46706	Add37980	Adc74335	Ada41112	Ada57231	Aae04434	Aae02405	Aaw78258	Aaw78260
Mouse spe	Mouse cys	Murine cy	Human sec	Fragment	Human ova	Human Pro	Human Pro	Human sec	Human sec	Human sec	Human sec	Human cys	Human cys	Fragment	Fragment				

ALIGNMENTS

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RESULT 1 .
AAU79858
ID AAU7988
XX AAU798
XX AAU798
XX AU798
XX YAU798
XX YAU798
XX YAU798
XX YAU798
XX Sperma
XX Sperma
XX Sperm
XX Sperm
XX Sperm
XX HOMO 8
XX WO2002
XX WO1: SPERMA
XX CYMO
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CC Genh
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Holloway JL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human cystatin-8 (Zcys8) antigenic fragment #6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15-JUL-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14-MAR-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200220567-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAU79858 standard; peptide; 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (ZYMO ) ZYMOGENETICS INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bishop PD;
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Query Match
                                                                                                                                                                                                                                                     quantities of Zcys8 protein and DNA sequences that encode Zcys8 genes. The polynucleotide encoding (I) is useful to detect and to localise the expression of a Zcys8 gene in a biological sample and Zcys8 oligonucleotide probes are useful for in vivo diagnosis. The polynucleotide encoding (I) is useful in determining whether a subject's chromosomes contain a mutation in the Zcys8 gene like aneuploidy, gene copy number changes, insertions, deletions, restriction site changes and rearrangements and genetic alterations that inactivate the Zcys8 gene.
                                                                                                                               Sequence 35
                                                                                                                                                                                                                 This sequence represents an antigenic peptide of human cystatin-8 (Zcys8)
                                                                                                                                   A.
100.0%;
                                    Length
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문 Ş Matches Local 35 7: Similarity KDSLQWITDQYNKESDDKYHFRIFRVLKVQRQVTD Conservative 0 Score 187; DB 5; Pred. No. 4.5e-19; Mismatches 0; 35 0

Gaps

0

AAU79853; AAU79853 standard; KDSLQWITDQYNKESDDKYHFRIFRVLKVQRQVTD protein; 115

Human cystatin-8 (Zcys8) antigenic fragment #1.

15-JUL-2002

(first entry)

Cystatin-8; Zcys8; cancer; procoagulant protein; thrombosis; spermatogenesis; seminal fluid viscosity; cryopreserved sper sperm motility; fertilisation; antigenic fragment cryopreserved sperm;

Homo sapiens

14-MAR-2002

29-AUG-2001; 2001WO-US026868

01-SEP-2000; 2000US-0230230P

(ZYMO) ZYMOGENETICS INC

Holloway JL, Gao Ņ Bishop PD;

WPI; 2002-383044/41.

Novel isolated mammalian cystatin-8 polypeptide useful for promoting spermatogenesis, and inhibiting cancer procoagulant protein which leads to inhibition of thrombotic events associated with cancer.

Claim 2; Page 94; 100pp; English

ARESULT 2
AAU79853
ID 79853
ID 79854
ID cc polypeptide (I). (I) is useful for: inhibiting cancer proceagalant cc protein in an individual and thus inhibiting the thrombotic events cascociated with cancer; promoting spermatogenesis, modulating seminal cc fluid viscosity, enhancing viability of cryopreserved sperm, sperm contility and fertilisation; and as antigenic peptides to generate cantibodies. Zcys8 is useful as research reagent for characterising sites of interaction between Zcys8 and its receptor. Zcys8 is useful in cc enhancing fertilisation during assisted reproduction in humans and in cc animals. Anti-(I) antibodies are useful to screen biological samples like blood, urine, saliva, tissue biopsy and autopsy material in vitro for the cresence of Zcys8. The antibodies are also useful to isolate large cquantities of Zcys8 protein and DNA sequences that encode Zcys8 genes. Cc The polynucleotide encoding (I) is useful to detect and to localise the expression of a Zcys8 gene in a biological sample and Zcys8 coligonucleotide probes are useful for in vivo diagnosis. The invention describes an isolated mammalian cystatin-8 (Zcys8)

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                                                                                                                                                                                                                                                                                                                                                                                                               Cystatin-8; Zcys8; cancer; procoagulant protein; thrombosis; spermatogenesis; seminal fluid viscosity; cryopreserved sper sperm motility; fertilisation; antigenic fragment.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 115 AA;
                                                                                                                                                                                                                                                                                                                                   29-AUG-2001; 2001WO-US026868.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAU79854;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAU79854 standard;
                                                                                                                                                                                                                                                                                                                01-SEP-2000; 2000US-0230230P
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                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              protein; 117
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 187; DB 5;
Pred. No. 1.8e-18;
                                                                                                                                                                                                                                                                                                                                                                                                               viscosity; cryopreserved sperm;
antigenic fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
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Novel isolated mammalian cystatin-8 polypeptide useful for promoting spermatogenesis, and inhibiting cancer procoagulant protein which leads to inhibition of thrombotic events associated with cancer.

WPI; 2002-383044/41.

(ZYMO) ZYMOGENETICS

INC.

Gao Z,

PD

Claim 2; Page 94-95; 100pp; English.

fluid viscosity, enhancing viability of cryopreserved sperm, sperm motility and fertilisation, and as antigenic peptides to generate antibodies. Zcys8 is useful as research reagent for characterising sites of interaction between Zcys8 and its receptor. Zcys8 is useful in enhancing fertilisation during assisted reproduction in humans and in animals. Anti-(I) antibodies are useful to screen biological samples like blood, urine, saliva, tissue biopsy and autopsy material in vitro for the presence of Zcys8 protein and DNA sequences that encode Zcys8 genes. The polynucleotide encoding (I) is useful to detect and to localise the expression of a Zcys8 gene in a biological sample and Zcys8 polynucleotide encoding (I) is useful to detect and Zcys8 gene in bollogical sample and Zcys8 (I) is useful for in vivo diagnosis. The polynucleotide encoding (I) is useful in determining whether a subject's chromosomes contain a mutation in the Zcys8 gene like aneuploidy, gene polypeptide (I). protein in an ind protein in an individual and thus inhibiting the thrombotic events associated with cancer; promoting spermatogenesis, modulating seminal The invention changes, (I) is useful for: inhibiting cancer procoagulant individual and thus inhibiting the thrombotic events describes an isolated mammalian cystatin-8 (Zcys8)

I). (I) is useful for: inhibiting cancer procoagula insertions, deletions, restriction site changes and

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RESULT 4
AAU79852
ID AAU7
XX AAU7
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XX BPEX
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XX BPEX
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XX WO20
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PM 114-W
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                        antibodies. Zcys8 is useful as research reagent for characterising sites of interaction between Zcys8 and its receptor. Zcys8 is useful in enhancing fertilisation during assisted reproduction in humans and in animals. Anti-(I) antibodies are useful to screen biological samples like blood, urine, saliva, tissue biopsy and autopsy material in vitro for the presence of Zcys8 The antibodies are also useful to isolate large quantities of Zcys8 protein and DNA sequences that encode Zcys8 genes. The polynucleotide encoding (I) is useful to detect and to localise the expression of a Zcys8 gene in a biological sample and Zcys8 oligonucleotide probes are useful for in vivo diagnosis. The polynucleotide encoding (I) is useful in determining whether a subject's chromosomes contain a mutation in the Zcys8 gene like aneuploidy; gene copy number changes, insertions, deletions, restriction site changes and rearrangements and genetic alterations that inactivate the Zcys8 gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            polypeptide (I). (I) is useful for: inhibiting cancer procoagulant protein in an individual and thus inhibiting the thrombotic events associated with cancer; promoting spermatogenesis, modulating seminal fluid viscosity, enhancing viability of cryopreserved sperm, sperm motility and fertilisation; and as antigenic paptides to generate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel isolated mammalian cystatin-8 polypeptide useful for promoting spermatogenesis, and inhibiting cancer procoagulant protein which leads to inhibition of thrombotic events associated with cancer.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 2; Page 93-94; 100pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-SEP-2000; 2000US-0230230P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      describes an isolated mammalian cystatin-8 (Zcys8)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%;
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Pred. No. 1.8e-18;
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19

Matches

32;

Conservative

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Mismatches

Indels

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Gaps

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KDSLQWITDQYNKESDDKYHFRIFRVLKVQRQ 32

KDSLQWITDQYNKESDDKYHFRIFRVLKVQRQ

50

Query Match

Local

Similarity

92.0%;

Score 172; DB 4; Pred. No. 8.8e-1

8.8e-17;

Length 50;

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30-JUN-2000; 2000US-00608408.
03-AUG-2000; 2000US-00632366.
21-SEP-2000; 2000US-0234687P.
27-SEP-2000; 2000US-023359P.
04-OCT-2000; 2000GB-00024263.
                                   The present invention relates to human single exon nucleic acid probes (SENP: see AAI10068-AAI28459). The present sequence is a peptide encoded by one such probe. The SENPs are derived from human HeLa cells. The SENPs can be used to produce a single exon microarray, which can be used for measuring human gene expression in a sample derived from human cervical epithelial cells. By measuring gene expression, the probes are therefore useful in grading and/or staging of diseases of the cervix, notably cervical cancer. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format allocations are the cervical cancer.
 Sequence 50 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 137 AA
                            directly
                                                                                                                                                                                                                                                         WPI; 2001-488901/53.
                                                                                                                                                                                                                                                                                  Penn
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cervical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Peptide #1530 encoded by probe for measuring cervical gene expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAM15096;
                                                                                                                                                                                 Claim 27; SEQ ID NO 19922; 487pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       09-AUG-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Probe; human; microarray; gene expression; cervical epithelial cell;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAM15096 standard; protein; 50
                                                                                                                                                                                                                                                                                                                (MOLE-) MOLECULAR DYNAMICS INC
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                                                                                                                                                                                                                                                                                    SG
                                                                                                                                                                                                              expression
                                                                                                                                                                                                             genome-derived single exon nucleic acid probes useful for analyzing expression in human cervical epithelial cells.
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                                                                                                                                                                                                                                                                                                                                                                                                                               2000US-0180312P
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                             WIPO
                             at
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                          ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                  Chen W,
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ID AAM2
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AC AAM2
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IT 17-C
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KW Prok
KW Genk
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ABB34086
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Best Local (
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26-MAY-2000;
30-JUN-2000;
03-AUG-2000;
                                                                                                                                                                                                                                                                                                             The invention relates to a single exon nucleic acid probe for measuring human gene expression in a sample derived from human foetal liver. The single exon nucleic acid probes may be used for predicting, measuring and displaying gene expression in samples derived from human fetal liver. The present sequence is a peptide encoded by a single exon nucleic acid probe of the invention. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format
                                                                                                                                                                                                                                                                                                                                                                                                                                 Human genome-derived single exon nucleic acid probes useful gene expression in human fetal liver.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Penn
              genetic disorder
                                                                                                                                                                                                                                                                            Sequence 50
                                                                                                                                                                                                                                                                                                                                                                                                            Claim 27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27-SEP-2000;
04-OCT-2000;
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                         Probe; microarray; human; placenta; antenatal diagnosis;
                                                                        17-OCT-2001
                                                                                                AAM27545;
                                                                                                                       AAM27545 standard;
                                                                                                                                                                                                                                                                                                   directly
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; foetal liver; gene expression; single exon nucleic acid probe
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                                                Peptide #1582 encoded by probe for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (MOLE-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21-SEP-2000;
                                                                                                                                                                                                                                        Local
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                                                                                                                                                                                              KDSLQWITDQYNKESDDKYHFRIFRVLKVQRQ 32
                                                                                                                                                                                                                                                                                                  from WIPO at ftp.wipo.int/pub/published_pct_sequences
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                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID
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2000US-0207456P.
; 2000US-00608408.
; 2000US-00632366.
; 2000US-0234687P.
; 2000US-0234589P.
; 2000US-0234587P.
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                                                                                                                      protein;
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                                                                                                                                                                                                                                         92.0%;
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                                                                                                                                                                                                                             Score 172; DB 4; 1 Pred. No. 8.8e-17; 0; Mismatches 0;
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                                                 measuring placental gene
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RESULT 8
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Best Local S
Matches 32
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26-MAY-2000;
30-JUN-2000;
03-AUG-2000;
 03-AUG-2000;
21-SEP-2000;
27-SEP-2000;
04-OCT-2000;
                                         04-FEB-2000;
26-MAY-2000;
30-JUN-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 50
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27-SEP-2000;
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                                                                                     30-JAN-2001; 2001WO-US000662.
                                                                                                          09-AUG-2001.
                                                                                                                               WO200157271-A2
                                                                                                                                                                                  Human;
                                                                                                                                                                                                    Peptide #5040 encoded by breast cell single exon nucleic acid probe
                                                                                                                                                                                                                            01-FEB-2002
                                                                                                                                                                                                                                               ABB32389;
                                                                                                                                                                                                                                                                                                                                                                                                                            human genetic disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 27; SEQ ID NO 27814; 654pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human genome-derived single exon nucleic acid gene expression in human placenta.
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                                                                                                                                                   Homo sapiens.
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32; Conserv
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2000US-0207456P.
2000US-020608408.
2000US-00632366.
2000US-0234687P.
2000US-0236359P.
2000US-0024263.
2000US-0207456P.
2000US-0068408.
2000US-00632366.
2000US-02346879.
2000US-0236359P.
2000US-0236359P.
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                                                               2000US-0180312P
                                                                                                                                                                                                                            (first entry)
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                                                                                                                                                                                  single exon
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Pred. No. 8.8e-17;
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                                                                                                                                                                                  probe; gene expression;
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                                                                                                                                                                                   breast; disease;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CC from mRNA of human breast, and then measuring the label bound to each CC probe of the microarray. The probes are useful for verifying the CC expression of regions of genomic DNA predicted to encode proteins. They CC are useful for gene discovery, and for determining predisposition and/or CC prognosing breast disease. Gene expression analysis is useful for CC assessing the toxicity of chemical agents on cells. The microarray of CC in invention presents a far greater diversity of probes for measuring CC gene expression, with far less bias than expressed sequence tag CC microarrays. The method is suitable for rapid production of functional CC information from genomic sequence. The present sequence is a peptide CC encoded by a single exon nucleic acid probe of the invention. Note: The sequence data for this patent did not form part of the printed CC specification, but was obtained in electronic format directly from WIPO CC at ftp.wipo.int/pub/published_pct_sequences
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Best Local S
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                            04-FEB-2000; 2000US-0180312P.
26-MAY-2000; 2000US-0207456P.
30-JUN-2000; 2000US-00608408.
03-AUG-2000; 2000US-00632366.
21-SEP-2000; 2000US-0234687P.
27-SEP-2000; 2000US-0234687P.
04-OCT-2000; 2000GB-00024263.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to a spatially-addressable set of single exon nucleic acid probes for measuring gene expression in a sample derived from human breast and BT 474 cells. The method involves contacting the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New spatially-addressable set of single exon nucleic for measuring gene expression in sample derived from comprises number of single exon nucleic acid probes.
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                                                                                                                                                        30-JAN-2001;
                                                                                                                                                                                          09-AUG-2001.
                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                    Human; microarray; single exon probe; gene expression; breast; disease;
                                                                                                                                                                                                                                                                                                                                                                                                    ABB28913;
                                                                                                                                                                                                                                                                                                                                                                                                                                  ABB28913 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        probes with a collection of detectably labelled nucleic acids
 (MOLE-)
                                                                                                                                                                                                                         WO200157271-A2
                                                                                                                                                                                                                                                                                                                                   Peptide #1564 encoded by breast cell single exon nucleic acid probe
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 MOLECULAR DYNAMICS INC
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                                                                                                                                                            2001WO-US000662
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Pred. No. 8.8e-17;
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Best Local S
Matches 32
                                                                          30-JUN-2000;
03-AUG-2000;
21-SEP-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to a spatially-addressable set of single exon nucleic acid probes for measuring gene expression in a sample derived
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 27; SEQ ID NO 11881; 327pp + Sequence Listing; English
                                                                                                                         04-FEB-2000;
26-MAY-2000;
                                                                                                                                                                                                                                                                                                                  Human; gene expression; heart; microarray; vascular system; cardiovascular disease; hypertension; cardiac arrhythmia;
                                                                                                                                                                                                                                                                                                                                                                 Protein #1523 encoded by probe for measuring heart cell gene expression.
                                                                                                                                                                                                                                                                                                                                                                                                     23-JAN-2002
                                                                                                                                                                         30-JAN-2001;
                                                                                                                                                                                                         09-AUG-2001.
                                                                                                                                                                                                                                         WO200157274-A2
                                                                                                                                                                                                                                                                                                     congenital heart
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABB19524 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            at ftp.wipo.int/pub/published_pct_sequences
                (MOLE-) MOLECULAR DYNAMICS INC
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                                                                          ; 2000US-0180312P.
; 2000US-0207456P.
; 2000US-00608408.
; 2000US-00632366.
; 2000US-0234687P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                         2001WO-US000666
                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                        disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          92.0%; but
100.0%; Pr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Chen
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 172; DB 4;
Pred. No. 8.8e-17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Rank DR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 50;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
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RESULT 11

AAM67252

ID AAM677252

ID AAM677252

AC AAM67

XX AAM67

XX AAM67

XX Humar

XX Humar

XX Humar

XX Homo

XX MO200

XX O9-Al

YD 09-Al

YD 09-Al

YD 09-Al

YD 04-Pl

PR 26-NU

PR 30-JI

PR 11-SI

PR 11-SI

PR WPI;

PR WPI;

XX WPI;

XX WPI;

XX EXAM
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Best Local !
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           probe. The probes may be used for predicting, measuring and displaying gene expression in samples derived from the human heart via microarrays. By measuring gene expression, the probes are useful for predicting, diagnosing, grading, staging, monitoring and prognosing diseases of the human heart and vascular system e.g. cardiovascular disease. Note: The hypertension, cardiac arrhythmias and congenital heart disease, Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at fit, wipo.int/pub/published pct sequences
                                                                                                                                                                                      04-FEB-2000;
26-MAY-2000;
30-JUN-2000;
03-AUG-2000;
21-SEP-2000;
27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                               Human bone marrow
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           measuring numan gene
ABA21535-ABA41305). T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Single
                                                                                                                                                                                                                                                                                        30-JAN-2001;
                                                                                                                                                                                                                                                                                                                    09-AUG-2001.
                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                     microarray;
                                                                                                                                                                                                                                                                                                                                                                                                                   Human; bone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          06-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAM67252;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAM67252 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 50 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      measuring human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              hearts.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Penn
                                                            Human genome-derived single exon nucleic acid probes useful for analyzing
                                                                                                                                               (MOLE-)
                                                                                                                                                                          04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                              WO200157276-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SG,
                                             expression
                                                                                                                    SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                               MOLECULAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KDSLQWITDQYNKESDDKYHFRIFRVLKVQRQ 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KDSLOWITDOYNKESDDKYHFRIFRVLKVORO 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hanzel
                                                                                                                  Hanzel DK,
                                                                                                                                                                                    ; 2000US-0180312P.
; 2000US-0207455P.
; 2000US-00608408.
; 2000US-0063236.
; 2000US-0234687P.
; 2000US-0236355P.
                                                                                                                                                                                                                                                                                                                                                                                                                  marrow expressed exon; gene expression analysis; probe;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       invention relates to single exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            nucleic
                                                                                                                                                                                                                                                                                                                                                                                                     cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                        2001WO-US000668.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                          2000GB-00024263.
                                                'n
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                                                                                                                                              DYNAMICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                              expressed probe encoded protein SEQ ID NO:
                                               human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         e expression in a sample derived from human heart. The present sequence is a protein encoded by one
                                                                                                                                                                                                                                                                                                                                                                                                     leukaemia; lymphoma; myeloma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21294;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          92.0%;
100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Chen
                                                                                                                  Chen W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         probes for analyzing gene expression
                                               bone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                530pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 172; DB 4; Pred. No. 8.8e-17;
                                                marrow.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rank DR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                    Rank DR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 50;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         acid probes for from human heart
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             <u>,,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                 27558.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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Example

4; SEQ

ID NO 27558; 658pp + Sequence Listing; English

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KDSLQWITDQYNKESDDKYHFRIFRVLKVQRQ

Conservative

0,

Indels

0

Gaps

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RESULT 12
AAM54871
IID AAM54
XX AAM54
XX O5-NO
DT O5-NO
DX Human
XX Human
XX Alzhe
OX Homo
DX Homo
XX Alzhe
XX Human
XX Homo
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Query Match
Best Local Similarity
Matches 32; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              probes which are derived from genomic sequences expressed in the human bone marrow. They can be used to measure gene expression in bone marrow samples, which may enable the improved diagnosis and treatment of cancers such as lymphoma, leukaemia and myeloma. The present sequence is a protein encoded by one of the probes of the invention
                                                                                                                                                                                 The present invention provides a number of single exon nucleic acid probes which are derived from genomic sequences expressed in the human brain. They can be used to measure gene expression in brain cell samples, which may enable the diagnosis and improved treatment of nervous system diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia, epilepsy and cancers. The present sequence is a protein encoded by one of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 50 AA;
                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                04-FEB-2000;
26-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; brain expressed exon; gene expression analysis; palzheimer's disease; multiple sclerosis; schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human brain expressed single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAM54871;
                                                                                                                                                                                                                                                                                                                                                                        Example 4; SEQ ID NO 26976; 650pp + Sequence Listing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30-JUN-2000;
03-AUG-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAM54871 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (MOLE-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 present invention provides a number of single exon nucleic
                                                                                                                                                              probes of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SG,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        l Similarity
32; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ۳
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MOLECULAR DYNAMICS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hanzel
                                                                                                             AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        nucleic acid probes for analyzing gene expression
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2000US-00608408.
2000US-00632366.
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2000US-0236359P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2000GB-00024263.
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                              92.0%;
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Pred. No.
  Score 172; DB 4;
Pred. No. 8.8e-17;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gene expression analysis; probe; microarray;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rank DR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ₽
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         probe encoded protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8.8e-17;
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                                                      Length 50;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                           English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            epilepsy; cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             <u>,,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                           'n
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19

ABG48915 standard; peptide;

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ARESULT 13
ABG48915
ID ABG48
XX ABG46
XX ABG46
XX ABG46
XX Humar
XX Humar
XX Hyper
XX Humar
PT Humar
P
RESULT 14
AAM02833
ID AAM02
                                                                                                                                                         유
                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 32; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to a single exon nucleic acid probe (SENP) (1) for measuring human gene expression in a sample derived from human adult liver, comprising one of 13109 defined nucleotide sequences given in the specification (or complements) fragments). The probe hybridises at high stringency to a nucleic acid molecule expressed in the human adult liver. (1) may be used for predicting, measuring and displaying gene expression in samples derived from human adult liver. The genes identified may be involved in genetic liver diseases such as cirrhosis, hyperlipoproteinaemia, hyperlipidaemia and hypercholesterolaemia which is associated with coronary heart disease. ABG47348-ABG5930 represent human liver single exon encoded peptides of the invention. Note: The sequence information for this patent does not appear in the printed specification but was obtained in electronic format directly from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      04-FEB-2000; 2000US-0180312P.
26-MAY-2000; 2000US-02074560.
30-JUN-2000; 2000US-00608408.
03-AUG-2000; 2000US-00632366.
AAM02833 standard; protein; 50 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human genome-derived single exon nucleic acid probes useful for analyzing gene expression in human adult liver.
                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 50
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 27; SEQ ID NO 27563; 658pp; English.
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hypercholesterolaemia; coronary heart disease.
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2000US-00632366.
2000US-0234687P.
2000US-0236359P.
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100.0%; Pred. No. 8.8e-17;
tive 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     04-FEB-2000;
26-MAY-2000;
30-JUN-2000;
03-AUG-2000;
                         Human peptide encoded by genome-derived single exon probe SEQ ID 26568.
                                                       19-AUG-2002
                                                                                                                                                                                                                                                                                                  Sequence 50
                                                                                                             ABG36903 standard; peptide; 50
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                                                                                                                                                                                                                                                                                                                             ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 27; SEQ ID NO 11573; 322pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel single exon nucleic acid probe used to measuring gene expression in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2001-476286/51.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Penn SG,
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27-SEP-2000;
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32; Conserv
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                                                                                                                                                                                                            KDSLQWITDQYNKESDDKYHFRIFRVLKVQRQ 32
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2000US-00632366.
2000US-0234687P.
2000US-0236359P.
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Human; single exon probe; asthma; lung cancer; COPD; ILD;

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chronic obstructive pulmonary disease; interstitial lung disease; familial idiopathic pulmonary fibrosis; neurofibromatosis; tuberous sclerosis; Gaucher's disease; Niemann-Pick disease; Hermansky-Pudlak syndrome; sarcoidosis; pulmonary histiocytosis; lymphangioleiomyomtosis; Karagener syndrome; pulmonary alveolar protesinosis; fibrocystic pulmonary dysplasia; primary ciliary dyskinesis; pulmonary hypertension; hyaline membrane disease.
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Homo sapiens.

WO200186003-A2.

15-NOV-2001.

30-JAN-2001; 2001WO-US000665.

04-PEB-2000; 2000US-0180312P.
26-MAY-2000; 2000US-0207456P.
30-JUN-2000; 2000US-00508408.
03-AUG-2000; 2000US-00532366.
21-SEP-2000; 2000US-0234637P.
27-SEP-2000; 2000US-02345359P.
04-OCT-2000; 2000GB-00024263.

(MOLE-) MOLECULAR DYNAMICS INC.

Penn SG, Hanzel DK, Chen W, Rank DR;

WPI; 2002-114183/15.

Spatially-addressable set of single exon nucleic acid probes, used to measure gene expression in human lung samples.

Claim 27; SEQ ID NO 26568; 634pp; English.

The invention relates to a spatially-addressable set of single exon nucleic acid probes for measuring gene expression in a sample derived from human lung comprising single exon nucleic acid grobes having one of complements or the 12387 Open reading frames derived from the 12614 complements or the 12387 Open reading frames derived from the 12614 complements or the 1287 Open reading frames derived from the 12614 collection of the movel set of probes which hybridise at high stringency to a nucleic acid expressed in the human lung, measuring gene expression in a sample collection of detectably labeled nucleic acids derived from human lung comprising (a) contacting the array with a collection of detectably predicting at least one exon from genomic sequences of the eukaryote; and (b) detecting at least one exon from genomic sequences of the elevaryote; and (b) detecting at least one exon from genomic sequences of the above mentioned microarray; assigning exons to a single exon probe. Comprising (a) identifying exons from genomic sequence by the method comprising (a) identifying exons from genomic sequence by the method comprising (a) identifying exons from genomic sequence by the method comprising (a) identifying exons from genomic sequence by the method comprising (a) identifying exons from genomic sequence by the method comprising (a) identifying exons from genomic sequence by the method comprising (a) identifying exons from genomic sequence by the microarrays having a probe with the exon, where a common pattern of microarrays having a probe with the exon, where a common pattern of the exones should be assigned to a single exon to a single exon to a single exon to analysis, and for identifying exons in a gene, particularly using human comprising one from the probes of the standard frames (ORR). The probes are used for gene expression end the standard frames (ORR). The probes are used for gene expression can describe the standard frames (ORR) in the standard frames (ORR). The probes are used for gene expression of t

밁 Search completed: March Job time: 32.7361 secs S SXC Matches Query Match Best Local Sequence 50 AA; directly from WIPO at ftp.wipo.int/pub/published_pct_sequences 19 32; μ Similarity KDSLQWITDQYNKESDDKYHFRIFRVLKVQRQ 32 KDSLQWITDQYNKESDDKYHFRIFRVLKVQRQ 50 Conservative 18, 2004, 14:14:59 92.0%; 0 Score 172; Pred. No. Mismatches œ DB .8e-17 5 Length 50 Indels 0 Gaps

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